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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JUL 02	LMEDLINE coverage updated
NEWS	3	JUL 02	SCISEARCH enhanced with complete author names
NEWS	4	JUL 02	CHEMCATS accession numbers revised
NEWS	5	JUL 02	CA/CAPplus enhanced with utility model patents from China
NEWS	6	JUL 16	CAPplus enhanced with French and German abstracts
NEWS	7	JUL 18	CA/CAPplus patent coverage enhanced
NEWS	8	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS	9	JUL 30	USGENE now available on STN
NEWS	10	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS	11	AUG 06	FSTA enhanced with new thesaurus edition
NEWS	12	AUG 13	CA/CAPplus enhanced with additional kind codes for granted patents
NEWS	13	AUG 20	CA/CAPplus enhanced with CAS indexing in pre-1907 records
NEWS	14	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS	15	AUG 27	USPATOLD now available on STN
NEWS	16	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS	17	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS	18	SEP 13	FORIS renamed to SOFIS
NEWS	19	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS	20	SEP 17	CA/CAPplus enhanced with printed CA page images from 1967-1998
NEWS	21	SEP 17	CAPplus coverage extended to include traditional medicine patents
NEWS	22	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	23	OCT 02	CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	24	OCT 19	BEILSTEIN updated with new compounds
NEWS EXPRESS	19	SEPTEMBER 2007:	CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS LOGIN			Welcome Banner and News Items
NEWS IPC8			For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 09:23:03 ON 24 OCT 2007

=> file casreact

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CASREACT' ENTERED AT 09:23:14 ON 24 OCT 2007

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FILE CONTENT:1840 - 20 Oct 2007 VOL 147 ISS 18

New CAS Information Use Policies, enter HELP USAGETERMS for details.

* CASREACT now has more than 13.8 million reactions *
*

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

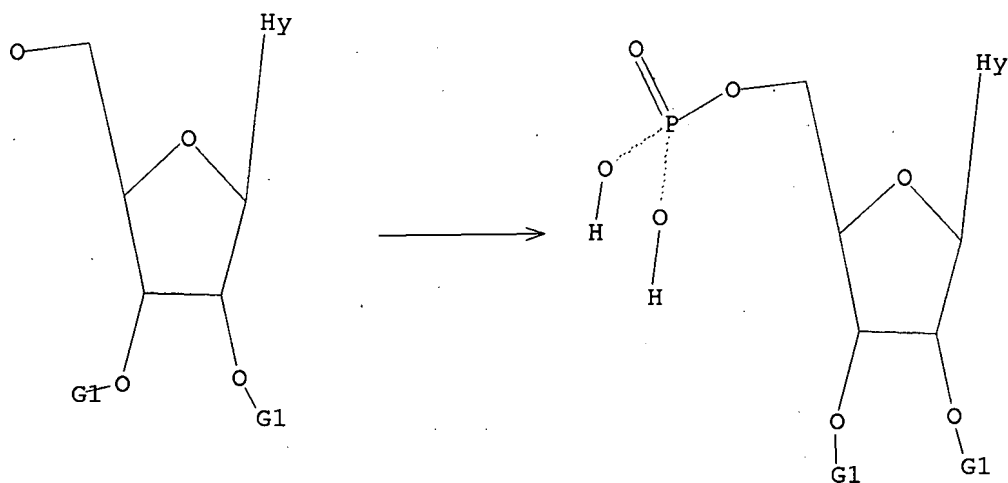
This file contains CAS Registry Numbers for easy and accurate substance identification.

L6 STRUCTURE UPLOADED

=> d

L6 HAS NO ANSWERS

L6 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s l6

SAMPLE SEARCH INITIATED 09:26:29 FILE 'CASREACT'

SCREENING COMPLETE - 1002 REACTIONS TO VERIFY FROM 58 DOCUMENTS

100.0% DONE 1002 VERIFIED 27 HIT RXNS

11 DOCS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED VERIFICATIONS: 18143 TO 21937

PROJECTED ANSWERS: 22 TO 418

L7 11 SEA SSS SAM L6 (27 REACTIONS)

=> d his

(FILE 'HOME' ENTERED AT 09:23:03 ON 24 OCT 2007)

FILE 'CASREACT' ENTERED AT 09:23:14 ON 24 OCT 2007

L1 STRUCTURE UPLOADED

L2 50 S L1

L3 960 S L1 FULL

L4 STRUCTURE UPLOADED

L5 50 S L4

L6 STRUCTURE UPLOADED

L7 11 S L6

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

115.80

116.01

FILE 'CAPLUS' ENTERED AT 09:26:51 ON 24 OCT 2007
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FILE COVERS 1907 - 24 Oct 2007 VOL 147 ISS 18
FILE LAST UPDATED: 23 Oct 2007 (20071023/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> d his

(FILE 'HOME' ENTERED AT 09:23:03 ON 24 OCT 2007)

FILE 'CASREACT' ENTERED AT 09:23:14 ON 24 OCT 2007

L1	STRUCTURE UPLOADED
L2	50 S L1
L3	960 S L1 FULL
L4	STRUCTURE UPLOADED
L5	50 S L4
L6	STRUCTURE UPLOADED
L7	11 S L6

FILE 'CAPLUS' ENTERED AT 09:26:51 ON 24 OCT 2007

=> file casreact

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.47	116.48

FILE 'CASREACT' ENTERED AT 09:27:03 ON 24 OCT 2007
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FILE CONTENT:1840 - 20 Oct 2007 VOL 147 ISS 18

New CAS Information Use Policies, enter HELP USAGETERMS for details.

*
* CASREACT now has more than 13.8 million reactions *
*

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16 full

FULL SEARCH INITIATED 09:27:05 FILE 'CASREACT'
SCREENING COMPLETE - 11713 REACTIONS TO VERIFY FROM 984 DOCUMENTS

100.0% DONE 11713 VERIFIED 948 HIT RXNS 202 DOCS
SEARCH TIME: 00.00.01

L8 202 SEA SSS FUL L6 (948 REACTIONS)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	113.55	230.03

FILE 'CAPLUS' ENTERED AT 09:27:09 ON 24 OCT 2007
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FILE COVERS 1907 - 24 Oct 2007 VOL 147 ISS 18
FILE LAST UPDATED: 23 Oct 2007 (20071023/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> s 18

L9 202 L8

=> s 19 and py<=2003

23955674 PY<=2003

L10 151 L9 AND PY<=2003

=> s l10 and (toluene or benzene or cyclohexane or hexane or pentane)

- 177989 TOLUENE
- 1535 TOLUENES
- 178557 TOLUENE
- (TOLUENE OR TOLUENES)
- 318564 BENZENE
- 14727 BENZENES
- 323659 BENZENE
- (BENZENE OR BENZENES)
- 97732 CYCLOHEXANE
- 3048 CYCLOHEXANES
- 99098 CYCLOHEXANE
- (CYCLOHEXANE OR CYCLOHEXANES)
- 115322 HEXANE
- 2037 HEXANES
- 116495 HEXANE
- (HEXANE OR HEXANES)
- 39651 PENTANE
- 1180 PENTANES
- 40258 PENTANE
- (PENTANE OR PENTANES)

L11 2 L10 AND (TOLUENE OR BENZENE OR CYCLOHEXANE OR HEXANE OR PENTANE)

=> d l11 1-2 ibib hitrn

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:894426 CAPLUS

DOCUMENT NUMBER: **138:106822**

TITLE: Highly Selective Binding of Organometallic Ruthenium Ethylenediamine Complexes to Nucleic Acids: Novel Recognition Mechanisms

AUTHOR(S): Chen, Haimei; Parkinson, John A.; Morris, Robert E.; Sadler, Peter J.

CORPORATE SOURCE: Department of Chemistry, University of Edinburgh, Edinburgh, EH9 3JJ, UK

SOURCE: Journal of the American Chemical Society (**2003**), 125(1), 173-186

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:106822

REFERENCE COUNT: 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:542313 CAPLUS

DOCUMENT NUMBER: **103:142313**

TITLE: N6-Substituted diarylalkyladenosines

INVENTOR(S): Bristol, James A.; Trivedi, Bharat; Moos, Walter H.

PATENT ASSIGNEE(S): Warner-Lambert Co. , USA

SOURCE: Eur. Pat. Appl., 62 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 139358	A2	19850502	EP 1984-305047	19840725 <--
EP 139358	A3	19851009		
EP 139358	B1	19881109		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
ZA 8405311	A	19860226	ZA 1984-5311	19840710 <--
CA 1239397	A1	19880719	CA 1984-458620	19840711 <--
IL 72422	A	19880831	IL 1984-72422	19840716 <--
AU 8430782	A	19850207	AU 1984-30782	19840718 <--
AU 570058	B2	19880303		
EP 251339	A2	19880107	EP 1987-110557	19840725 <--
EP 251339	A3	19890726		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 38520	T	19881115	AT 1984-305047	19840725 <--
FI 8403013	A	19850202	FI 1984-3013	19840730 <--
FI 77666	B	19881230		
FI 77666	C	19890410		
DK 8403715	A	19850202	DK 1984-3715	19840731 <--
DK 159855	B	19901217		
DK 159855	C	19910513		
NO 8403084	A	19850204	NO 1984-3084	19840731 <--
NO 158876	B	19880801		
NO 158876	C	19881109		
JP 60075494	A	19850427	JP 1984-159394	19840731 <--
HU 34990	A2	19850528	HU 1984-2928	19840731 <--
ES 534752	A1	19860116	ES 1984-534752	19840731 <--
US 4657897	A	19870414	US 1985-756004	19850717 <--
US 4657898	A	19870414	US 1985-756922	19850718 <--
PRIORITY APPLN. INFO.:			US 1983-519284	A 19830801
			US 1984-621943	A 19840622
			EP 1984-305047	P 19840725
OTHER SOURCE(S):			CASREACT 103:142313; MARPAT 103:142313	

=> d his

(FILE 'HOME' ENTERED AT 09:23:03 ON 24 OCT 2007)

FILE 'CASREACT' ENTERED AT 09:23:14 ON 24 OCT 2007

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L1      STRUCTURE UPLOADED
L2      50 S L1
L3      960 S L1 FULL
L4      STRUCTURE UPLOADED
L5      50 S L4
L6      STRUCTURE UPLOADED
L7      11 S L6

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FILE 'CAPLUS' ENTERED AT 09:26:51 ON 24 OCT 2007

FILE 'CASREACT' ENTERED AT 09:27:03 ON 24 OCT 2007

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L8      202 S L6 FULL

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FILE 'CAPLUS' ENTERED AT 09:27:09 ON 24 OCT 2007

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L9      202 S L8

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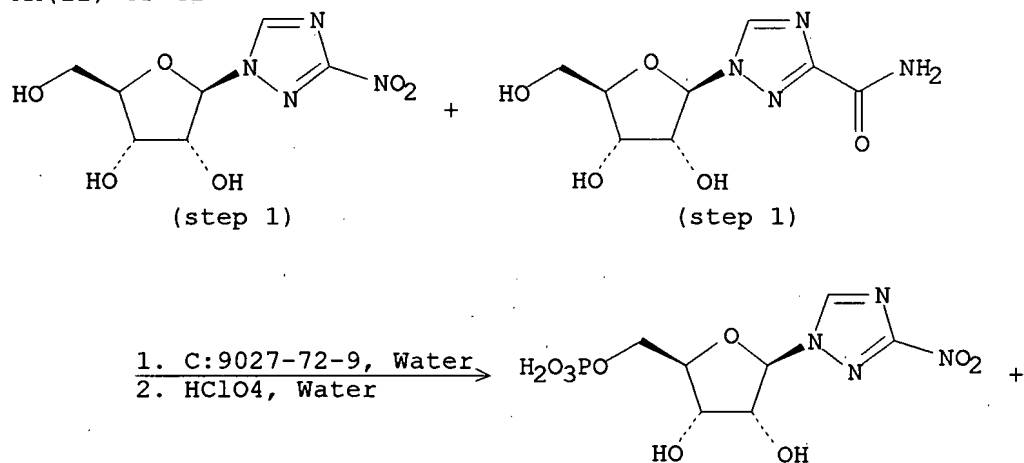
L10 151 S L9 AND PY<=2003
L11 2 S L10 AND (TOLUENE OR BENZENE OR CYCLOHEXANE OR HEXANE OR PENTA

=> d 18 1-202

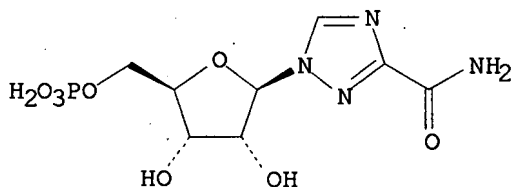
YOU HAVE REQUESTED DATA FROM FILE 'CASREACT' - CONTINUE? (Y)/N:y

L8 ANSWER 1 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(11) OF 41



RX(11) OF 41



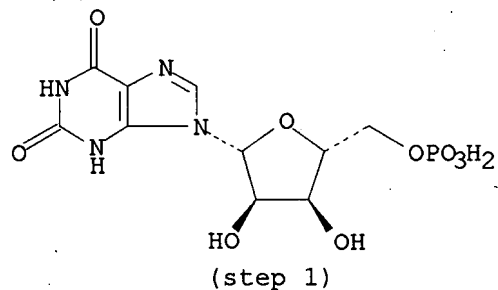
REF: Bioorganic & Medicinal Chemistry Letters, 17(11), 3203-3207;
2007

NOTE: biotransformation, buffered solution, described medium, enzymic,
kinetic study

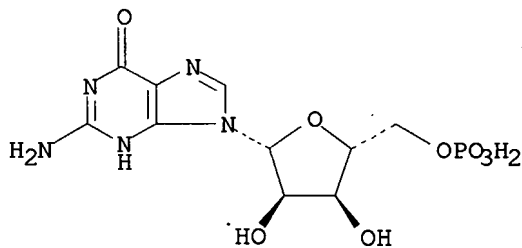
CON: STAGE(1) 4 hours, 37 deg C, pH 6.0
STAGE(2) room temperature; room temperature, pH 7

L8 ANSWER 2 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



1. C:9023-55-6,
R:56-65-5,
R:10034-99-8,
(NH₄)₂SO₄, Water
2. Cl₃CCO₂H, Water



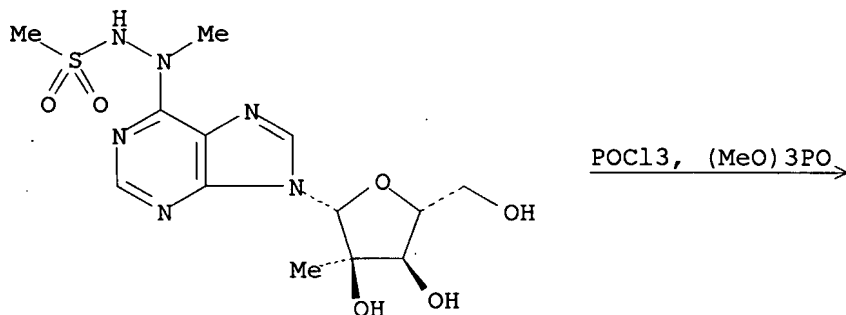
REF: PCT Int. Appl., 2007069861, 21 Jun 2007

NOTE: alternative preparation shown, biotransformation, buffered solution (Tris-HCl), enzymic (mutant recombinant 5'-XMP aminase from Escherichia coli used), reagent assumed (second stage TCA used)

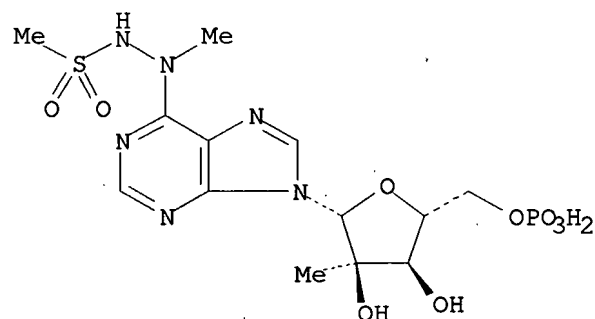
CON: 15 minutes, 42 deg C, pH 8.6

L8 ANSWER 3 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 64



RX(1) OF 64



86%

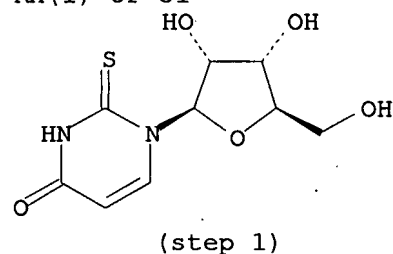
REF: Bioorganic & Medicinal Chemistry Letters, 17(9), 2452-2455; 2007

NOTE: regioselective

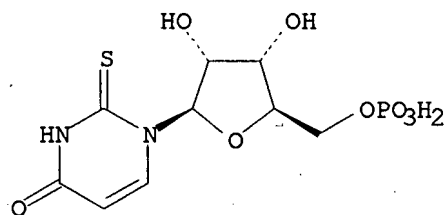
CON: 5 hours, 0 deg C

L8 ANSWER 4 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 31



1. Proton sponge, (MeO)3PO
2. POCl3
3. H2CO3-Et3N (1:1), Water



NH₃

35%

REF: Journal of Medicinal Chemistry, 50(9), 2030-2039; 2007

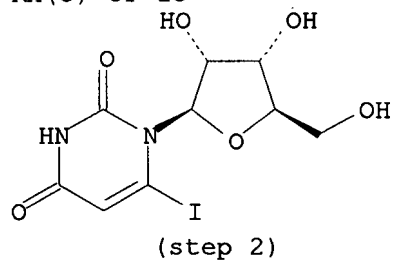
CON: STAGE(1) 10 minutes, 0 deg C

STAGE(2) 2 hours, 0 deg C

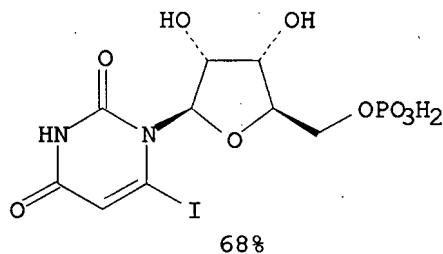
STAGE(3) 1 hour, room temperature; overnight, room temperature

L8 ANSWER 5 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(5) OF 15



1. Pyridine, POCl₃,
Water, MeCN
3. Water



REF: Journal of Medicinal Chemistry, 50(5), 915-921; 2007

NOTE: regioselective

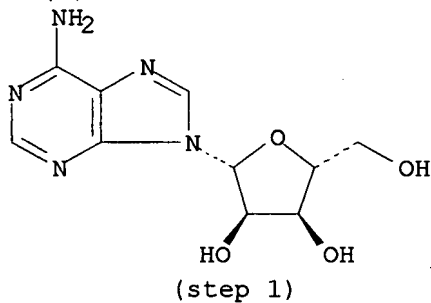
CON: STAGE(1) 10 minutes, 0 deg C

STAGE(2) 5 hours, 0 deg C

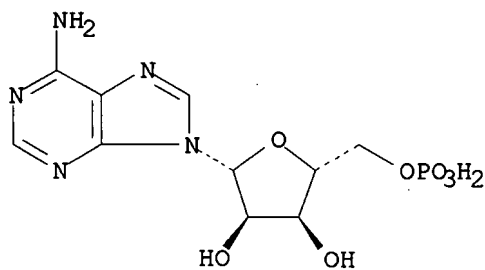
STAGE(3) 1 hour, <room temperature

L8 ANSWER 6 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(4) OF 17



1. POCl₃, (EtO)₃P(O),
Water
2. NaOH, Water



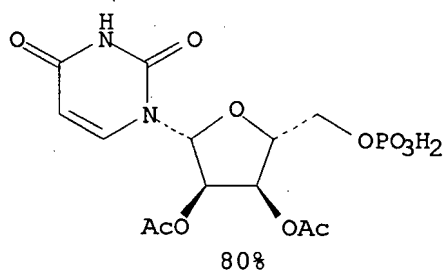
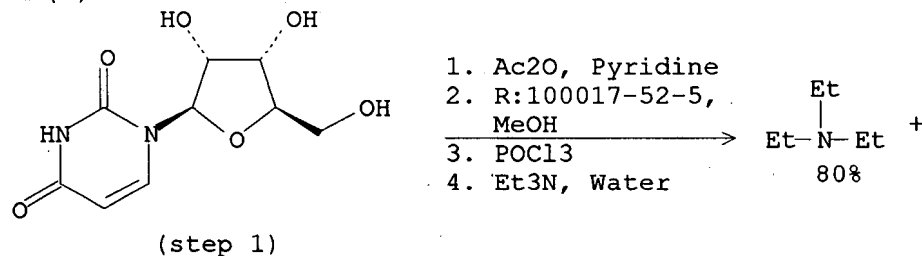
Na
78%

REF: Shipin Gongye Keji, 26(8), 149,156; 2005

CON: STAGE(1) -5 - 0 deg C; 8 hours, -5 - 0 deg C
 STAGE(2) pH 5.5

L8 ANSWER 7 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

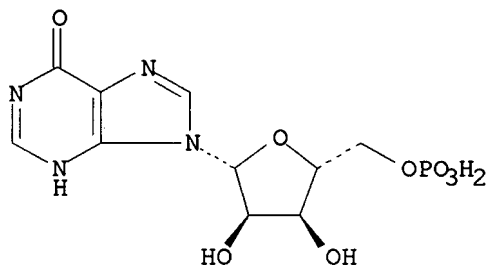
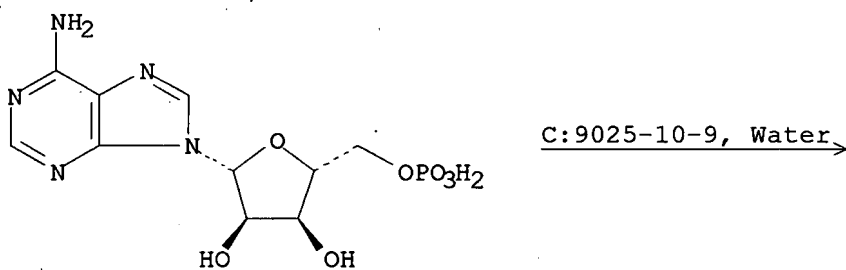
RX(8) OF 22



REF: Tetrahedron Letters, 48(5), 799-803; 2007
 NOTE: regioselective (stage 2)

L8 ANSWER 8 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 4

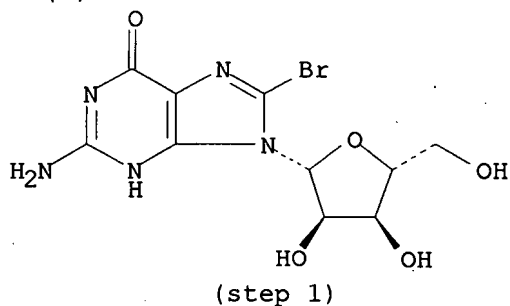


REF: Journal of the Chemical Society of Pakistan, 28(3), 284-287;
 2006

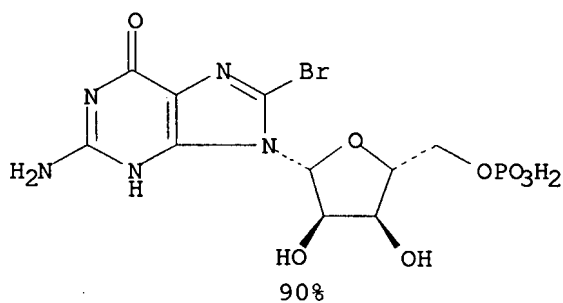
NOTE: enzymic, biotransformation, kinetic study, 5'-AMP deaminase from rabbit muscle used, succinate buffered solution used
CON: room temperature, pH 5.9

L8 ANSWER 9 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 25



1. Proton sponge,
MeCN
2. POCl₃
3. Et₄N.Br, Water

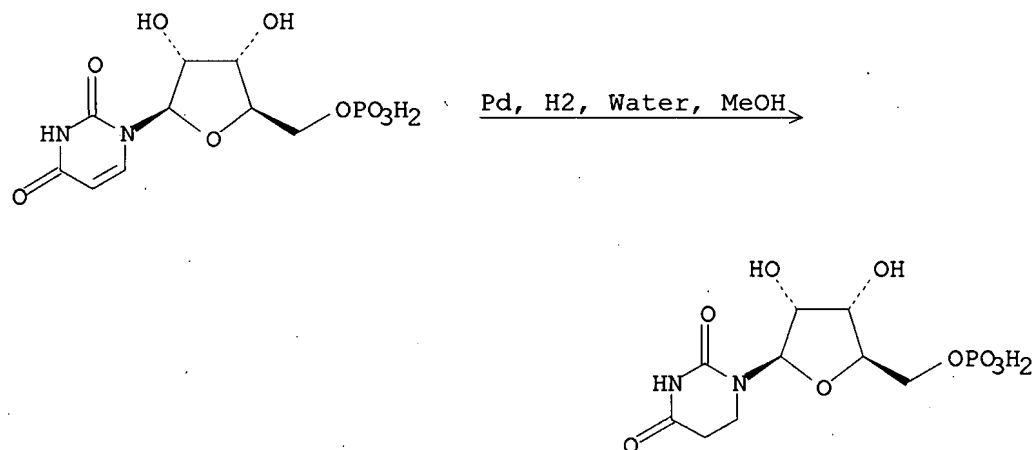


REF: Organic & Biomolecular Chemistry, 4(24), 4526-4532; 2006

CON: STAGE(1) 30 minutes, room temperature;
room temperature -> 2 deg C
STAGE(2) 2 - 5 deg C; 2 - 3 hours, 2 deg C
STAGE(3) 0 deg C, pH 7.3; overnight, 4 deg C

L8 ANSWER 10 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

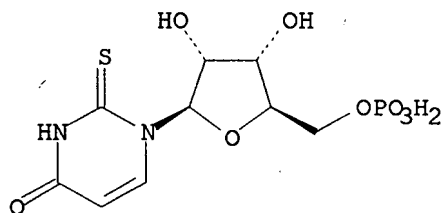
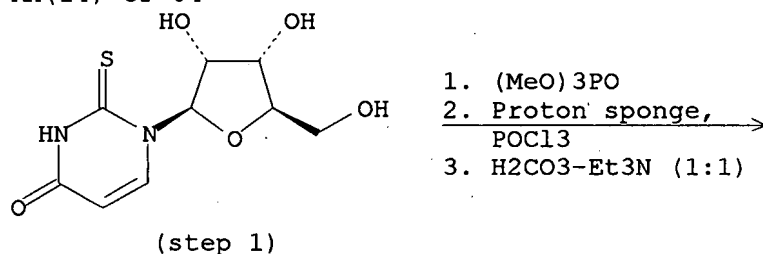
RX(13) OF 13



REF: Tetrahedron Letters, 47(52), 9253-9256; 2006
NOTE: anhydrous methanol alternately used as solvent
CON: 24 hours, room temperature

L8 ANSWER 11 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

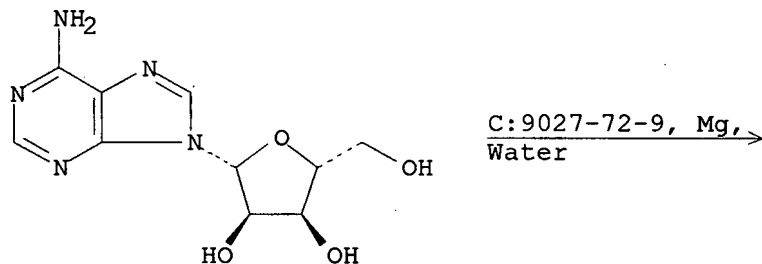
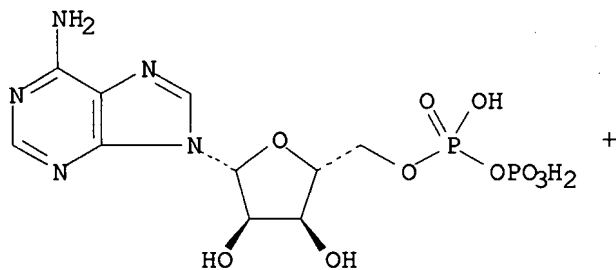
RX(14) OF 84



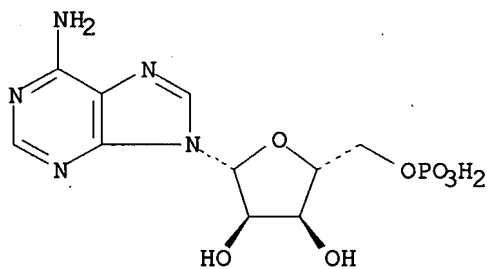
REF: Journal of Medicinal Chemistry, 49(24), 7076-7087; 2006
CON: STAGE(1) room temperature; room temperature -> 0 deg C
STAGE(2) 5 hours, 0 - 4 deg C
STAGE(3) 0 - 4 deg C, pH 7.5; 4 deg C -> room temperature;
1 hour, room temperature

L8 ANSWER 12 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



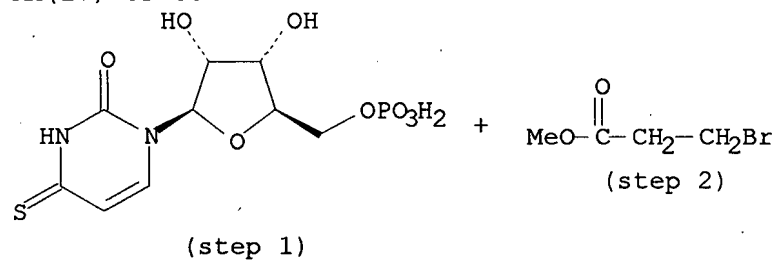
RX(1) OF 1



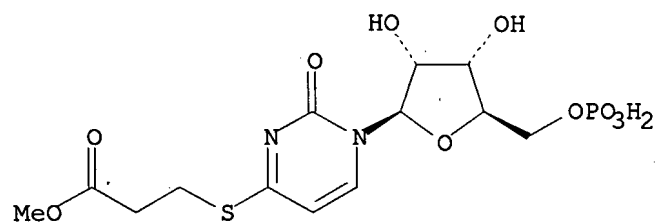
REF: Nucleosides, Nucleotides & Nucleic Acids, 25(9-11), 1107-1112;
2006

NOTE: biotransformation, enzymic, adenosine kinase from rat liver used

RX(17) OF 33



1. NaOH, Water, MeOH
2. DMF

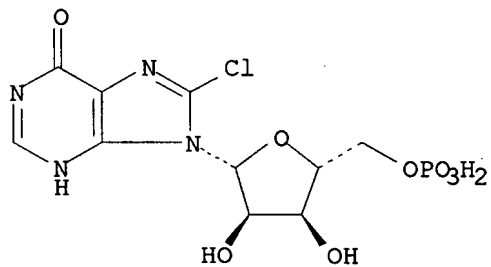
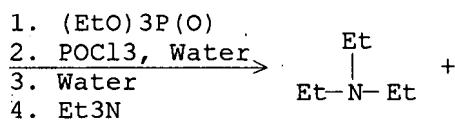
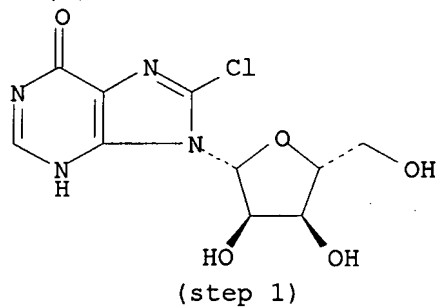


REF: Journal of Medicinal Chemistry, 49(18), 5532-5543; 2006

NOTE: chemoselective (stage 2)
CON: STAGE(1) 2 hours, room temperature
STAGE(2) 8 hours, 90 deg C

L8 ANSWER 14 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(8) OF 136

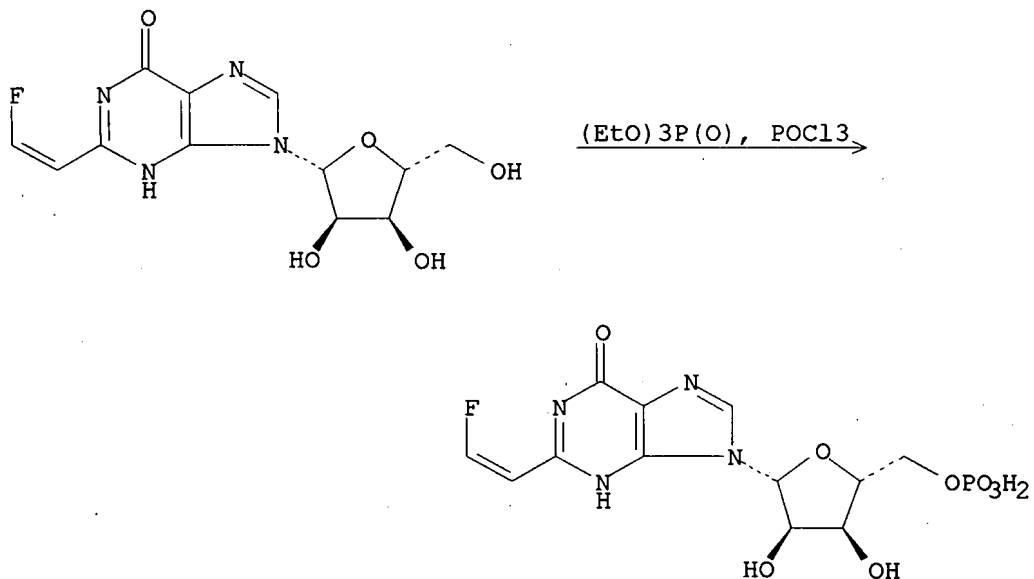


REF: Journal of Medicinal Chemistry, 49(17), 5162-5176; 2006

CON: STAGE(1) heated; 0 deg C
STAGE(2) 0 deg C; 1 hour, 0 deg C
STAGE(3) 0 deg C; 15 minutes, 0 deg C;
0 deg C -> room temperature
STAGE(4) room temperature

L8 ANSWER 15 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

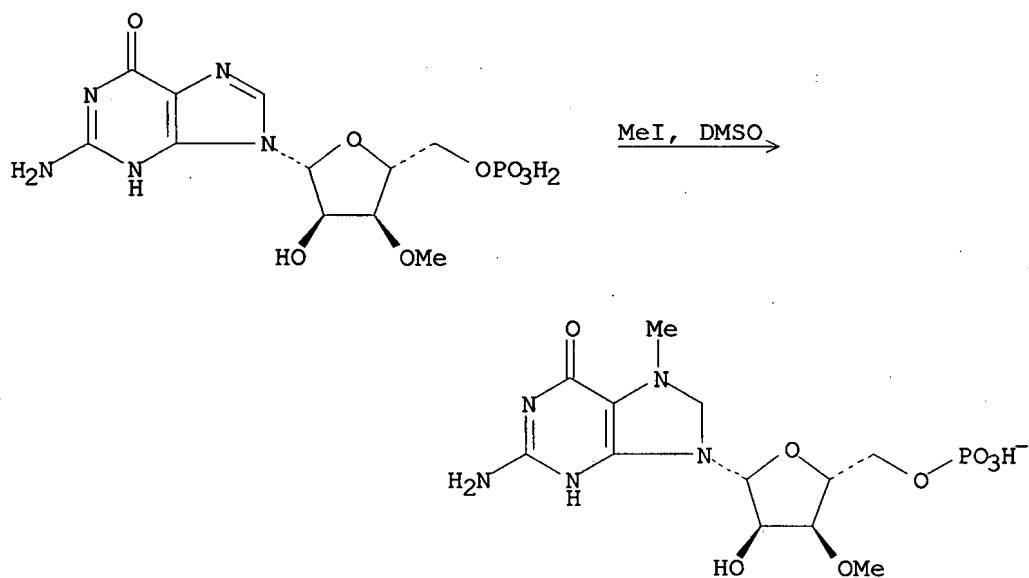
RX(8) OF 36



REF: Nucleosides, Nucleotides & Nucleic Acids, 24(5-7), 717-720;
2005

L8 ANSWER 16 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 26

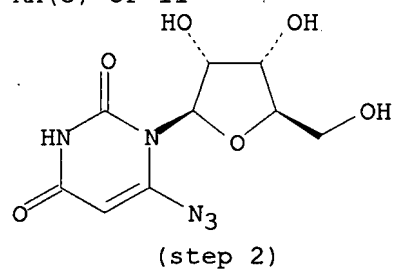


REF: Nucleosides, Nucleotides & Nucleic Acids, 24(5-7), 615-621;
2005

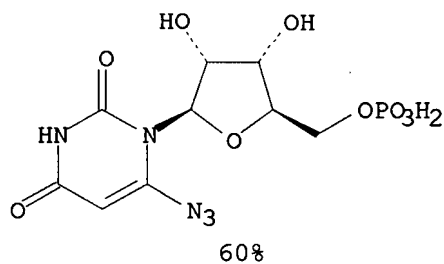
NOTE: regioselective

L8 ANSWER 17 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 11



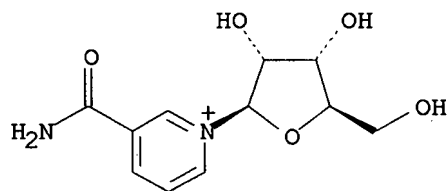
1. Pyridine, POCl₃,
Water, MeCN
3. Water



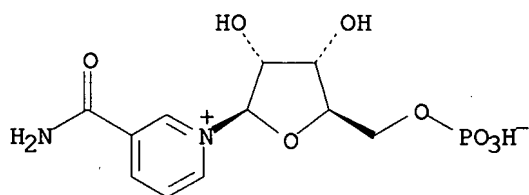
REF: Journal of Medicinal Chemistry, 49(16), 4937-4945; 2006
CON: STAGE(1) 10 minutes, 0 deg C
STAGE(2) 5 hours, 0 deg C
STAGE(3) 1 hour, <room temperature

L8 ANSWER 18 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 19



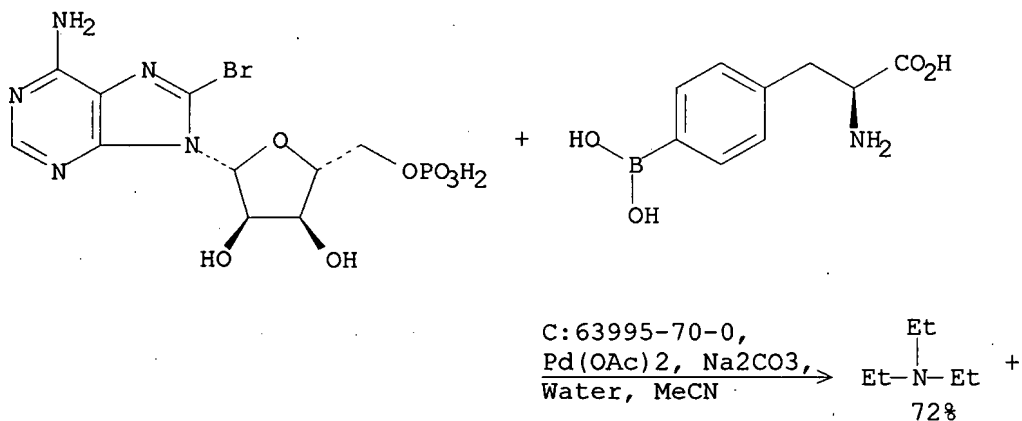
(MeO)₃PO, POCl₃



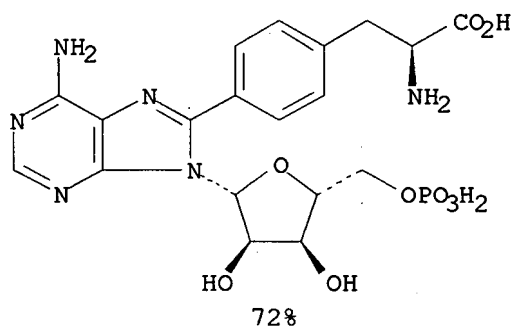
REF: Nucleosides, Nucleotides & Nucleic Acids, 24(5-7), 513-518;
2005
CON: 4 hours, 0 deg C

L8 ANSWER 19 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 26

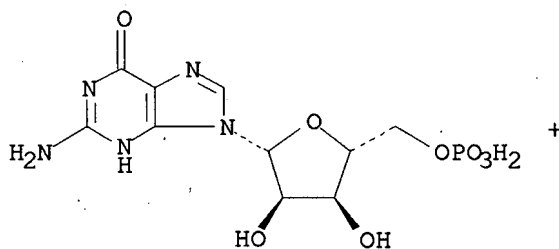
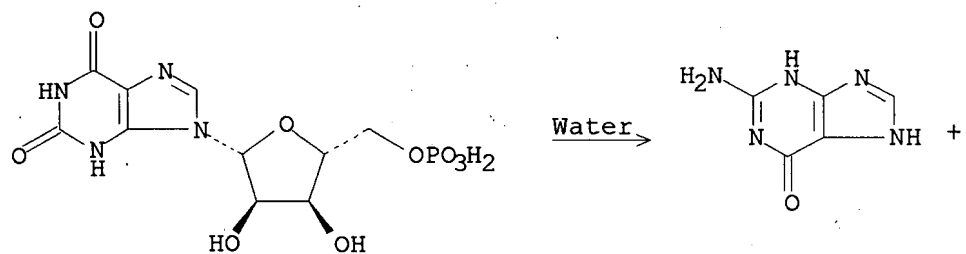


RX(6) OF 26

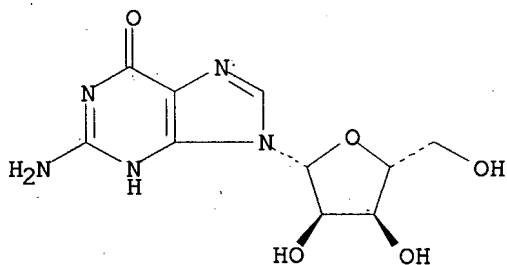


REF: Organic & Biomolecular Chemistry, 4(11), 2278-2284; 2006
NOTE: Suzuki-Miyaura coupling, lower yield obtained with microwave heating, optimization study
CON: 1.5 hours, 125 deg C

RX(1) OF 1



RX(1) OF 1

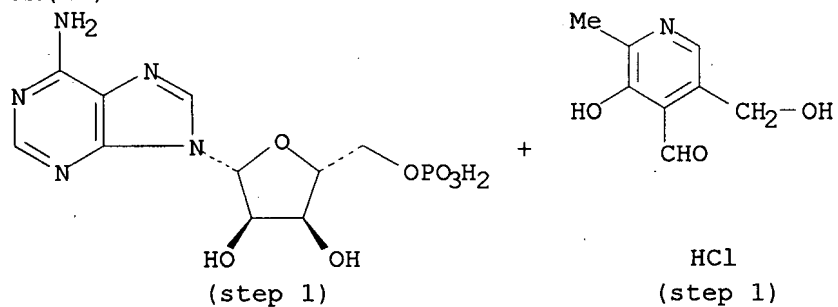


REF: PCT Int. Appl., 2006078132, 27 Jul 2006

NOTE: biotransformation(recombinant Escherichia coli GPU1114 (Accession No. KCCM-10536) whole cells with inactivated deoD, ushA, and glnL genes, expressing XMP aminase used), described medium118003

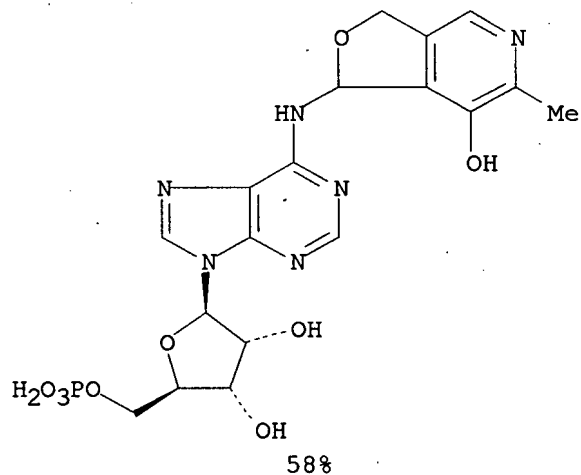
CON: 8 hours, 42 deg C

RX(17) OF 76



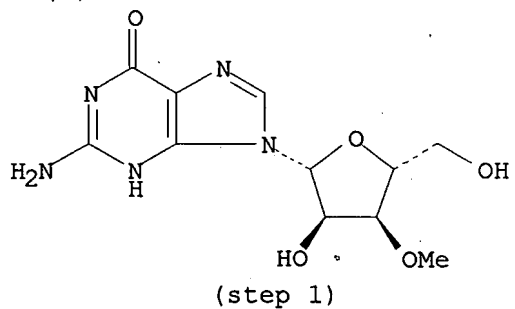
1. NaOH, Water, EtOH
2. HCl, Water

RX(17) OF 76

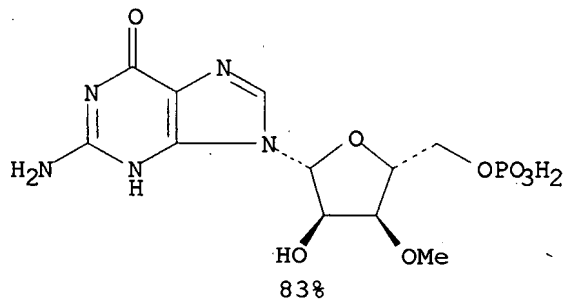


REF: Current Medicinal Chemistry, 12(18), 2095-2162; 2005
CON: STAGE(1) heated; 15 minutes, heated; room temperature
STAGE(2) room temperature

RX(7) OF 33



1. POCl₃, (MeO)₃PO
2. H₂CO₃-Et₃N (1:1),
Water

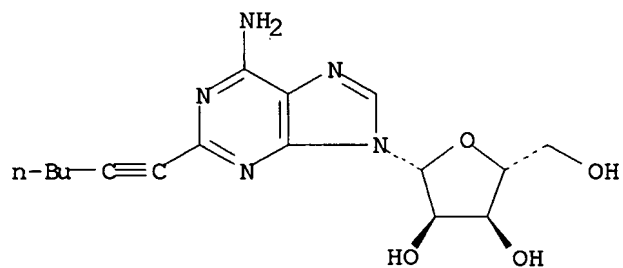


REF: Bioorganic & Medicinal Chemistry, 14(9), 3223-3230; 2006

NOTE: regioselective

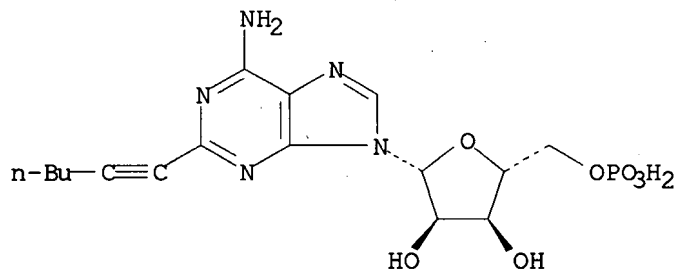
L8 ANSWER 23 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 10



Et₃N, POCl₃, (MeO)₃PO,
Water

RX(1) OF 10



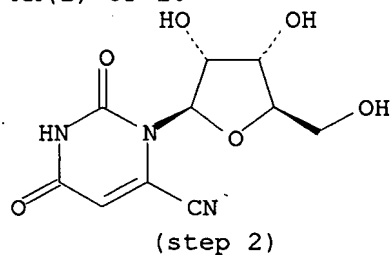
NH₃
63%

REF: Collection Symposium Series, 7 (Chemistry of Nucleic Acid Components), 87-93; 2005

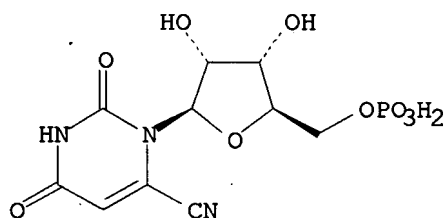
CON: STAGE(1) 3 hours, room temperature; room temperature, neutralized

L8 ANSWER 24 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 10



1. Pyridine, POCl₃,
Water, MeCN
3. Water



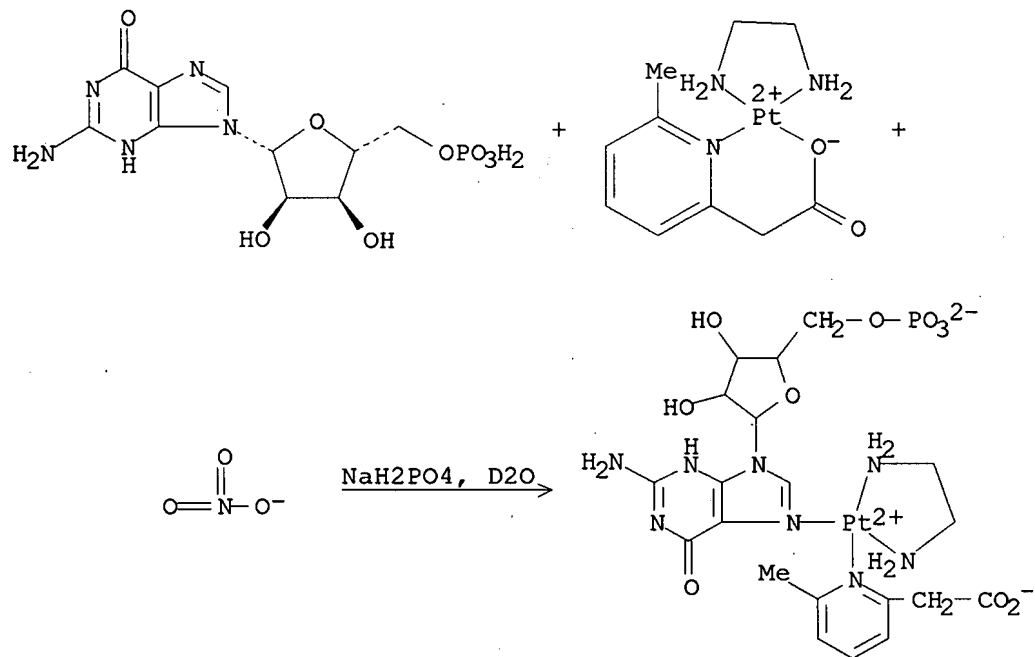
REF: Journal of the American Chemical Society, 127(43), 15048-15050; 2005

NOTE: regioselective

CON: STAGE(1) 0 deg C
STAGE(2) 5 hours, 0 deg C
STAGE(3) cooled

L8 ANSWER 25 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

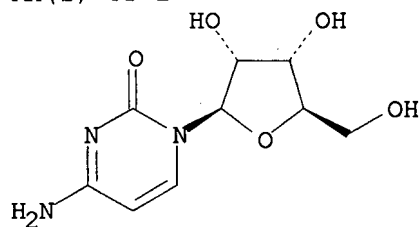
RX(5) OF 13



REF: Journal of Inorganic Biochemistry, 99(10), 2013-2023; 2005
 CON: 25 deg C, pH 6.1

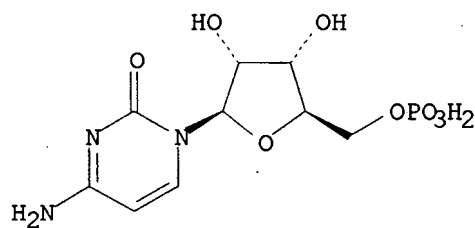
L8 ANSWER 26 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



(step 1)

1. POCl₃, (EtO)₃P(O)
2. Water



82%

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 1616475, 18 May 2005

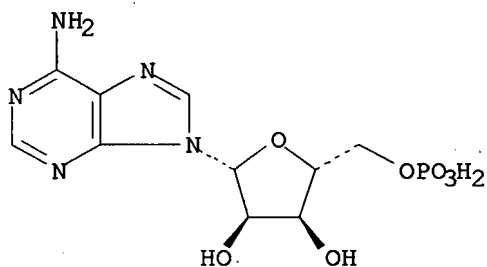
CON: STAGE(1) -5 - -10 deg C
STAGE(2) 1 hour, 0 - 5 deg C

L8 ANSWER 27 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

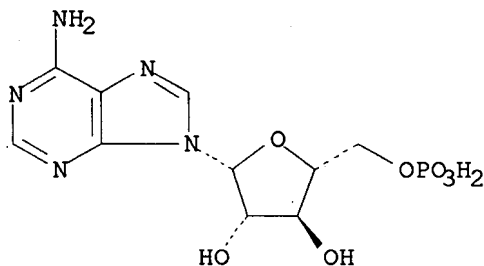
RX(33) OF 380 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 28 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 6 - 3 STEPS



1.1. TsCl
2.4. Ac₂O



REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 1560065, 05 Jan 2005

NOTE: 3) ion-exchange resin Dowex 50x4 used as reagent, Raney nickel used as catalyst in stage 3, incremental addition of catalyst in stage 3, stereoselective in stage 2

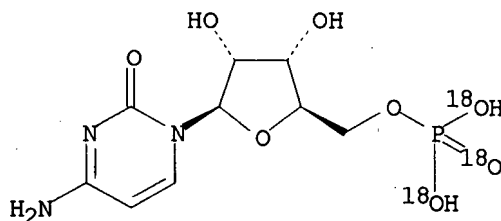
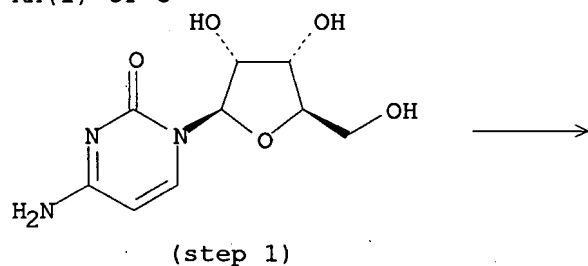
CON: STEP(1.1) 15 hours, 0 deg C
STEP(1.2) pH 4
STEP(2.1) room temperature -> 5 deg C, pH 4; 18 hours,
0 - 5 deg C
STEP(2.2) 15 minutes, 0 - 5 deg C, pH 4
STEP(2.3) pH 4
STEP(2.4) 2 hours, reflux
STEP(3.1) 0 - 5 deg C; 20 hours, 65 - 70 deg C
STEP(3.2) room temperature; 15 hours, 95 - 100 deg C
STEP(3.3) 3.5 hours, reflux
STEP(3.4) pH 2.5

L8 ANSWER 29 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(10) OF 109 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 30 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3



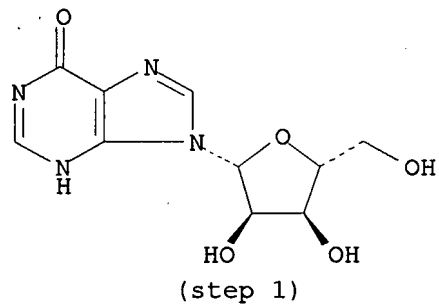
REF: Journal of Labelled Compounds & Radiopharmaceuticals, 47(14), 1007-1017; 2004

NOTE: biotransformation, enzymic, Amberlite IR-120 (+) used

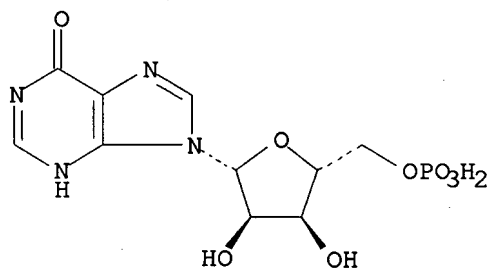
CON: STAGE(1) 10 hours, room temperature, pH 7
STAGE(2) room temperature, pH 7.5
STAGE(3) room temperature

L8 ANSWER 31 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



1. POCl₃, Water,
(EtO)₃P(O)
2. NaCl, Water



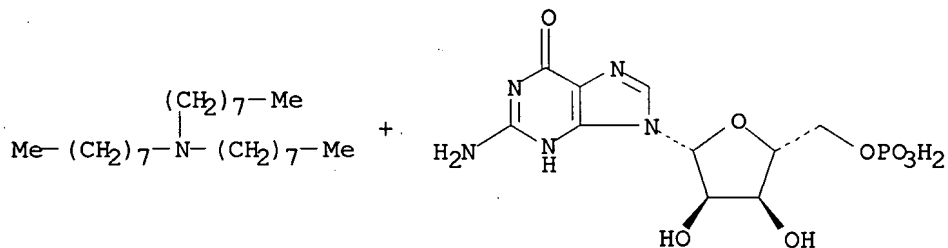
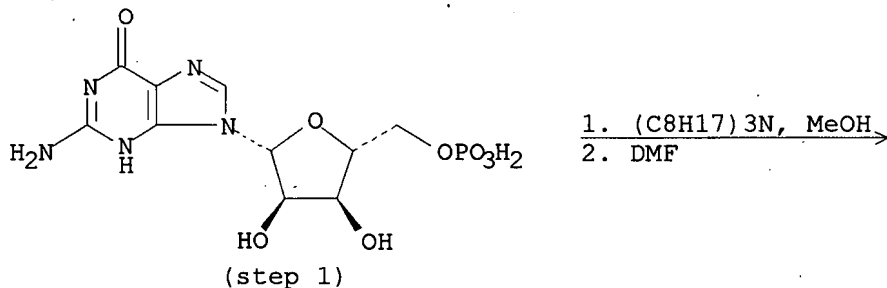
2 Na

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 1539846, 27 Oct 2004

CON: STAGE(1) 1.5 hours, 5 deg C
STAGE(2) 1 hour, <0 deg C

L8 ANSWER 32 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 10



REF: Nucleosides, Nucleotides & Nucleic Acids, 23(10), 1667-1680; 2004

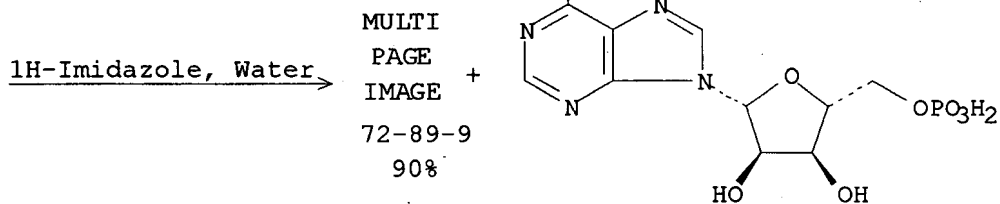
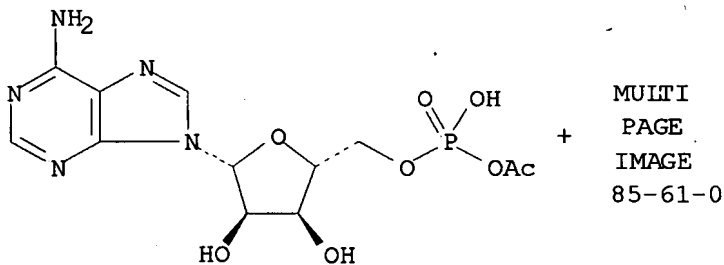
NOTE: low pressure

CON: STAGE(1) 10 minutes, room temperature

STAGE(2) 24 hours, 50 deg C

L8 ANSWER 33 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2

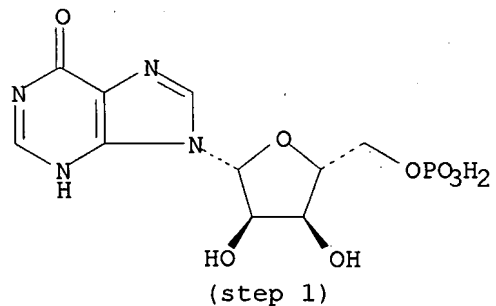


REF: Tetrahedron Letters, 46(25), 4307-4310; 2005

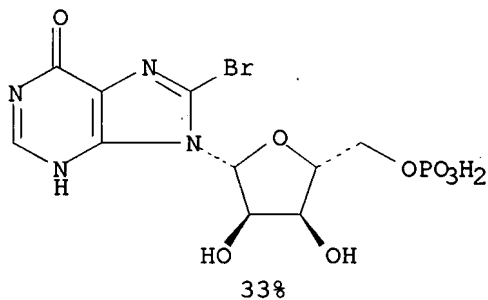
CON: 10 minutes, room temperature

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RX(4) OF 24



1. Na₂HPO₄, Br₂, Water
2. HEPES, Water
3. Et₄N.Br, Water
4. MeOH

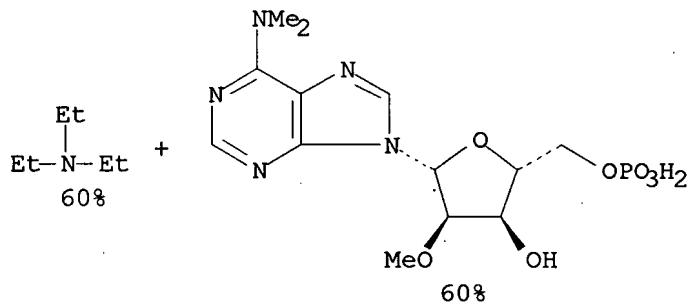
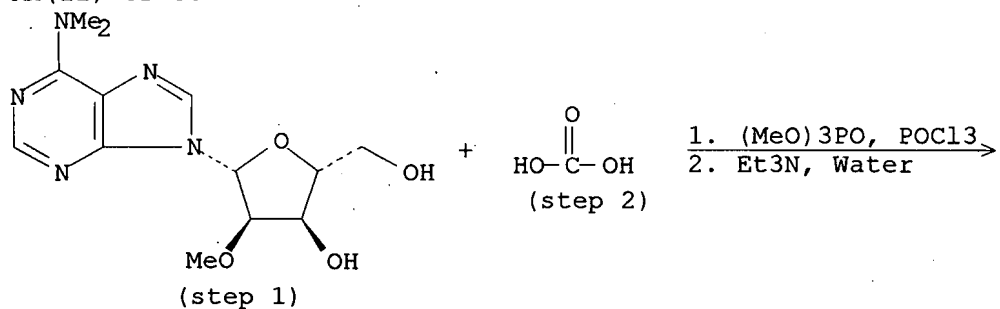


REF: Journal of Organic Chemistry, 70(12), 4810-4819; 2005

CON: STAGE(1) 5 days, room temperature, pH 6.2
STAGE(2) room temperature
STAGE(3) room temperature, pH 6.2
STAGE(4) reflux

L8 ANSWER 35 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(11) OF 38

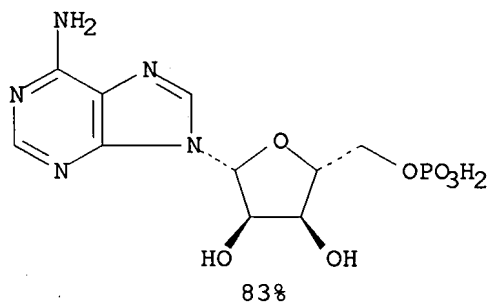
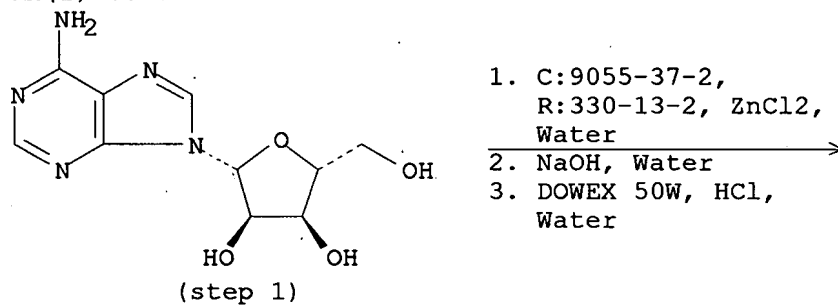


REF: RNA, 10(9), 1469-1478; 2004

CON: STAGE(2) neutralized

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RX(1) OF 8

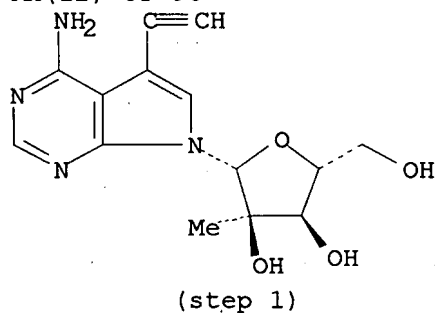


REF: Biotechnology Letters, 26(24), 1847-1850; 2004

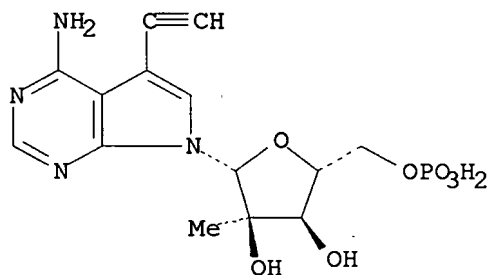
NOTE: biotransformation, enzymic, Dowex in Cl(-) form used, Ervinia herbicola 47/3 whole cells used, buffered soln. (sodium acetate), using other bivalent metal ions or no ions gave lower yield
CON: STAGE(1) 6 hours, 37 deg C, pH 4.5
STAGE(2) 37 deg C -> 80 deg C, pH 7
STAGE(3) room temperature

L8 ANSWER 37 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(12) OF 90



1. (MeO)₃PO,
Proton sponge,
POCl₃
2. Water

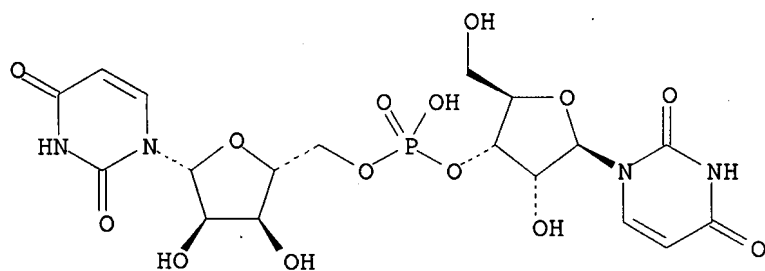


REF: PCT Int. Appl., 2005042556, 12 May 2005

NOTE: regioselective, buffered solution-(Et₃N)HCO₃ buffer used in stage 2
CON: STAGE(1) room temperature -> 5 deg C; 3 hours, 5 deg C
STAGE(2) pH 7.5

L8 ANSWER 38 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

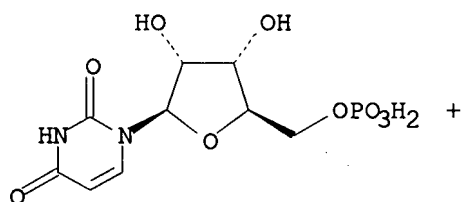
RX(3) OF 13



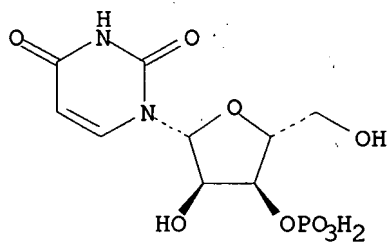
NH_3

C:87481-53-6,

$(\text{HOCH}_2)_3\text{CNH}_2 \cdot \text{HCl}$, KCl ,
Water



RX(3) OF 13



Na

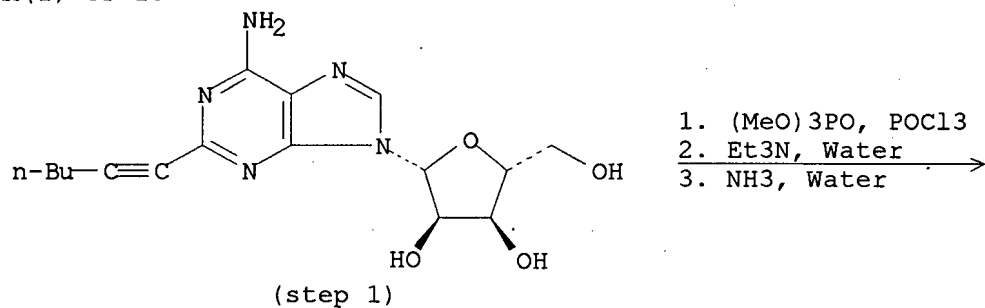
REF: Macromolecular Research, 12(4), 359-366; 2004

NOTE: buffered solution, kinetic study

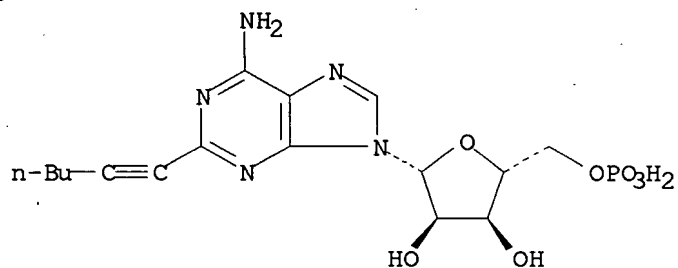
CON: 50 deg C, pH 7.4

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RX(1) OF 10



RX(1) OF 10



NH₃

66%

REF: Journal of Medicinal Chemistry, 48(8), 2763-2766; 2005

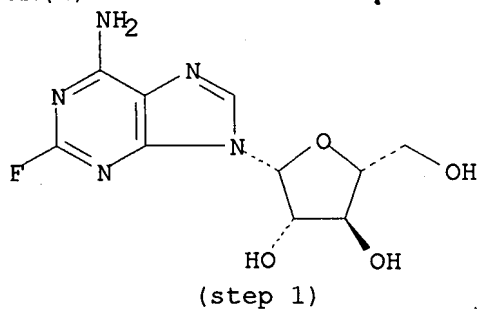
CON: STAGE(1) 3 hours, room temperature

STAGE(2) room temperature, neutralized

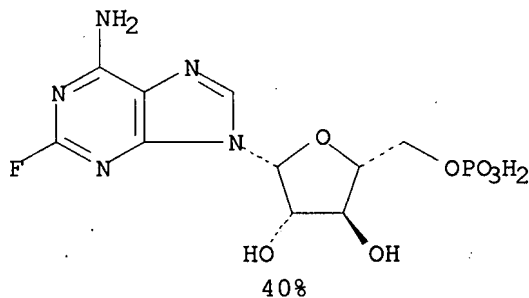
STAGE(3) room temperature

L8 ANSWER 40 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



1. (EtO)3P(O)
2. POCl3
3. PhMe
4. NaOH, Water
5. DOWEX 50W
6. Water



REF: PCT Int. Appl., 2005040183, 06 May 2005

NOTE: regioselective

CON: STAGE(1) -20 - -15 deg C

STAGE(2) 1 hour, -15 - -10 deg C; 48 hours, -15 - -10 deg C

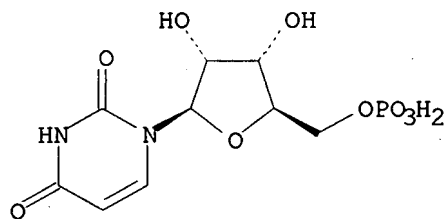
STAGE(3) 1.5 hours, -15 - -10 deg C; 1 - 2 hour, -15 - -10 deg C

STAGE(4) room temperature, pH 11

STAGE(5) 15 minutes, room temperature

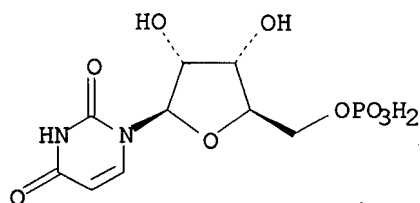
STAGE(6) 15 minutes, room temperature

RX(2) OF 6



DOWEX 50W

2 Na

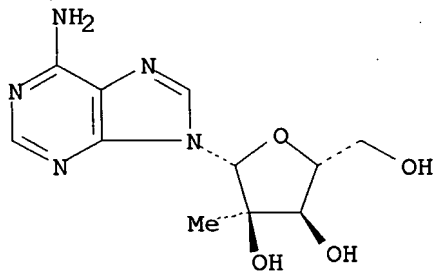


REF: Tetrahedron: Asymmetry, 16(2), 309-311; 2005

NOTE: Dowex H+ used

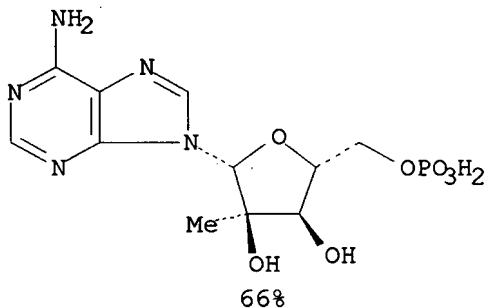
L8 ANSWER 42 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 33



(step 1)

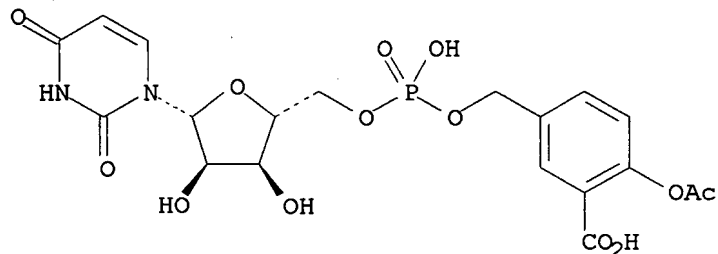
1. P(OMe)3
2. POCl3
3. NaOH, Water
4. DOWEX 50X8, Water



REF: Bioorganic & Medicinal Chemistry, 13(6), 2045-2053; 2005
NOTE: regioselective
CON: STAGE(1) cooled
STAGE(2) <room temperature; 17 hours, 0 deg C
STAGE(3) neutralized
STAGE(4) room temperature

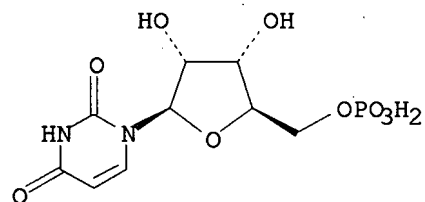
L8 ANSWER 43 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(21) OF 256



(step 1)

1. F3CCO2H, CH2Cl2
2. Amberlite IR20,
Water, Dioxane



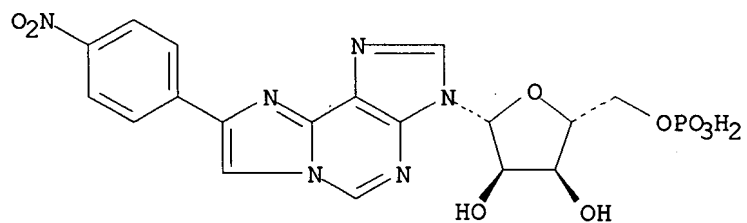
538

REF: Journal of Organic Chemistry, 70(3), 1100-1103; 2005

NOTE: regioselective, Amberlite AG-50W-X8 used in second stage(100-200 mesh)
CON: STAGE(1) 30 minutes, room temperature
STAGE(2) 30 minutes, room temperature

L8 ANSWER 44 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

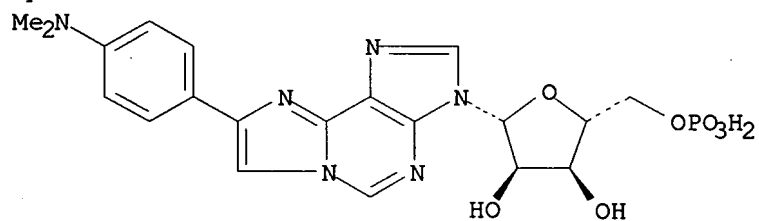
RX(3) OF 4



2 Na

HCHO, Pd, H₂, Water →

RX(3) OF 4



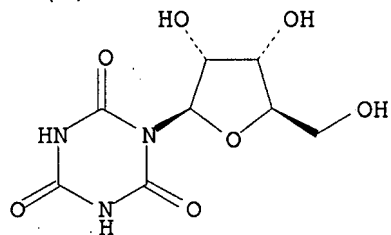
2 Na

89%

REF: Bioorganic & Medicinal Chemistry, 12(23), 6119-6135; 2004
CON: 12 hours, room temperature, 55 psi

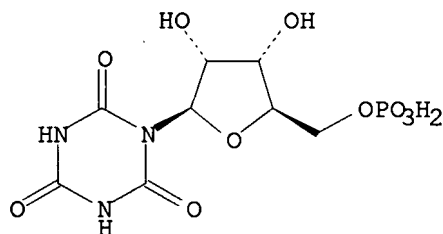
L8 ANSWER 45 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(8) OF 25



(step 1)

1. (MeO)₃PO, POCl₃,
Water
2. NaOH, Water



2 NH₃

48%

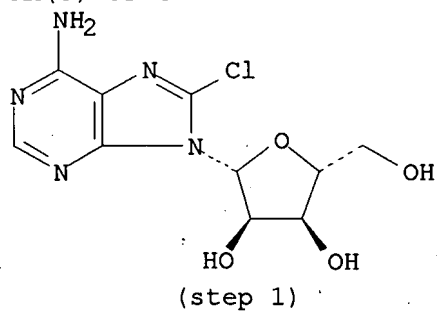
REF: Carbohydrate Research, 339(16), 2641-2649; 2004

CON: STAGE(1) 10 hours, 0 deg C

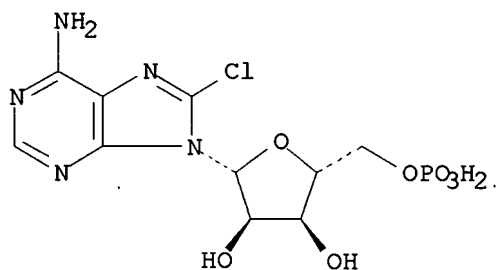
STAGE(2) 0 deg C, pH 1.5; 0 deg C -> 70 deg C; 30 minutes,
70 deg C

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RX(3) OF 4



1. POCl₃, (MeO)₃PO
2. H₂CO₃-Et₃N (1:1),
Water
3. NaI, Me₂CO, MeOH



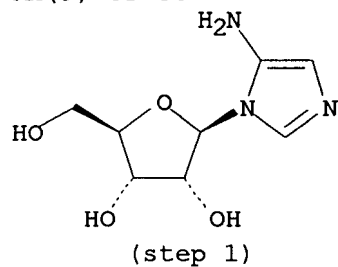
Na
78%

REF: Journal of Biological Chemistry, 279(39), 40405-40411; 2004

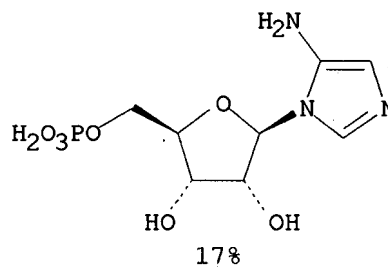
CON: STAGE(1) 0 deg C; 2 hours, 0 deg C
STAGE(3) room temperature

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RX(9) OF 36



1. 3-Methylphenol
2. [Cl₂P(O)]₂O
3. NaOH, Water

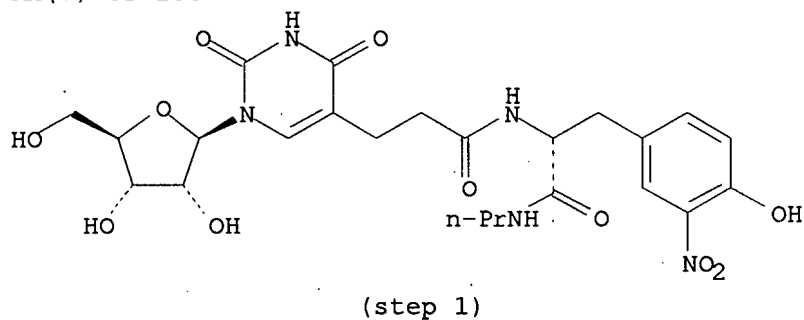


REF: Organic & Biomolecular Chemistry, 2(17), 2538-2546; 2004

NOTE: isotopically labeled analogs similarly prepared
CON: STAGE(1) room temperature -> 0 deg C
STAGE(2) 4.5 hours, 0 deg C
STAGE(3) <room temperature, pH 7.5

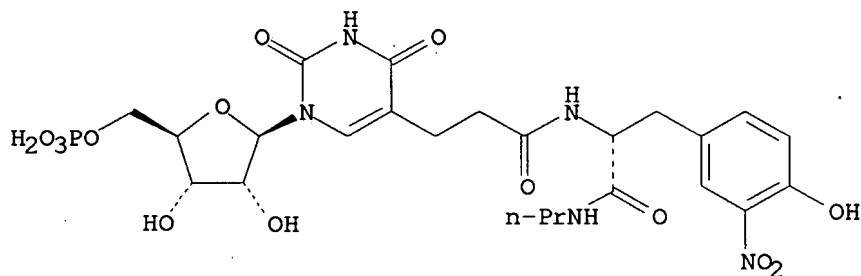
L8 ANSWER 48 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(7) OF 253



1. (EtO)3P(O), POCl3
2. HCl, Water

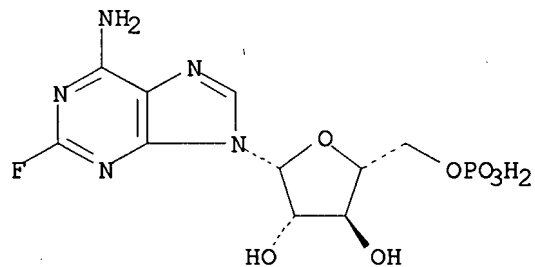
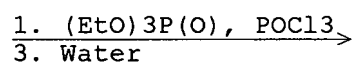
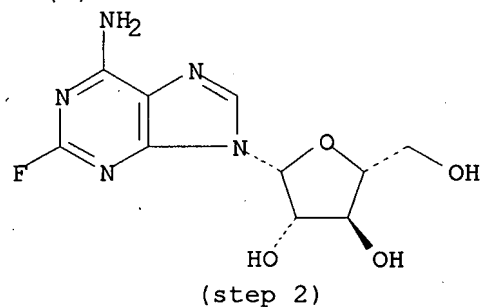
RX(7) OF 253



REF: Synlett, (10), 1784-1788; 2004

L8 ANSWER 49 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3

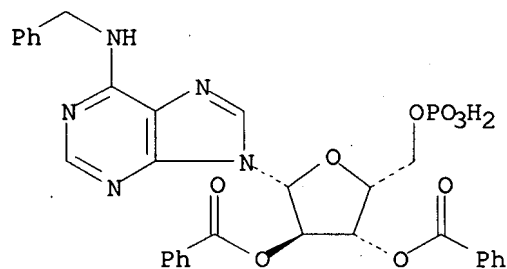
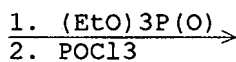
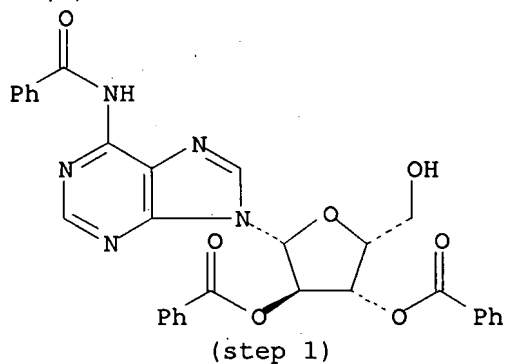


REF: Eur. Pat. Appl., 1464708, 06 Oct 2004

CON: STAGE(1) -10 deg C; 1 hour, -10 deg C
STAGE(2) -10 deg C; 6 hours, -10 deg C; 23 hours, -10 deg C

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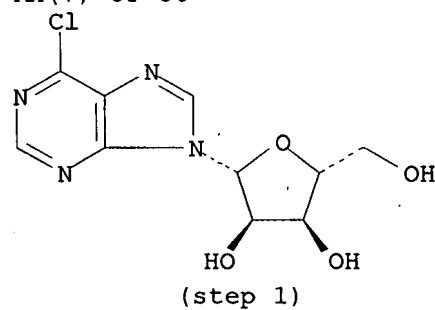
RX(4) OF 93



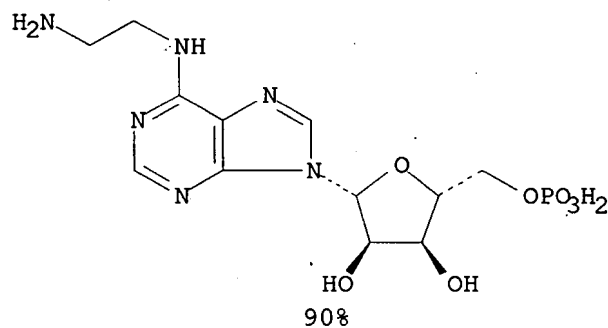
REF: Bioorganic & Medicinal Chemistry, 12(2), 475-487; 2004
NOTE: Yoshikawa's methodol. used
CON: STAGE(1) >room temperature; >room temperature -> 0 deg C
STAGE(2) 0 deg C; 1 hour, 0 deg C

L8 ANSWER 51 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(7) OF 50



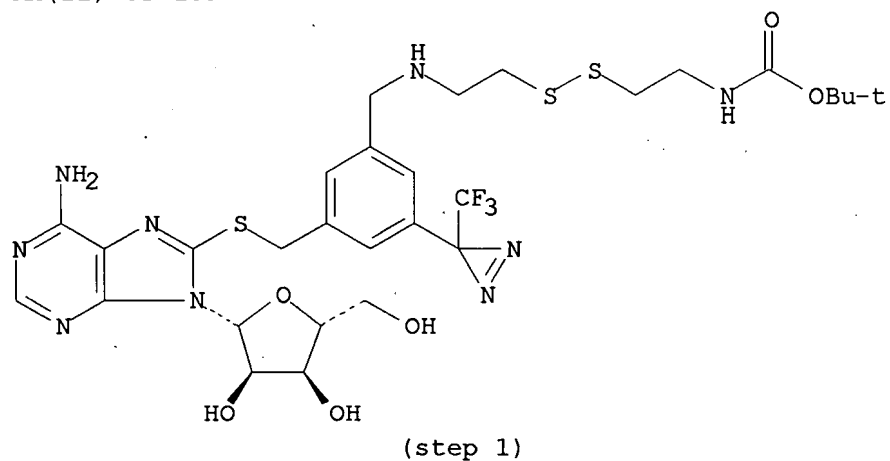
1. POCl₃, (EtO)₃P(O)
2. Water
3. NaOH
4. H₂NCH₂CH₂NH₂
5. HCl, Water



REF: RNA, 9(12), 1562-1570; 2003
CON: STAGE(1) 0.5 hours, 0 deg C; 1.5 hours, 0 deg C
STAGE(3) pH 5
STAGE(4) 30 minutes, room temperature
STAGE(5) pH 3.5

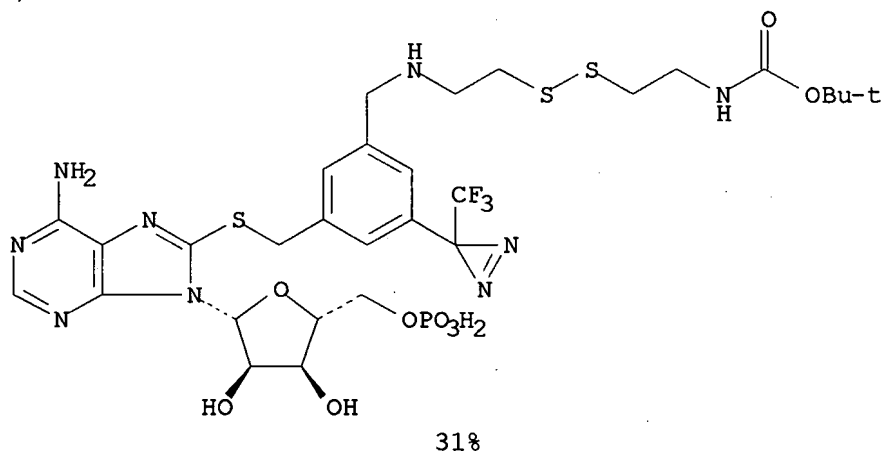
L8 ANSWER 52 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(11) OF 139



1. (MeO) 3PO
2. POCl3
3. Et4N.Br →

RX(11) OF 139



REF: Organic & Biomolecular Chemistry, 1(16), 2821-2832; 2003

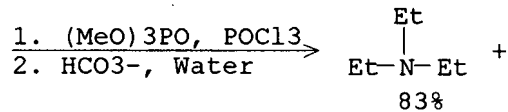
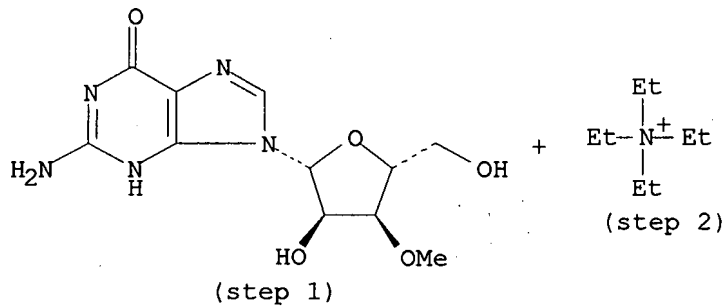
NOTE: proton sponge used in first stage

CON: STAGE(1) 20 minutes, 0 deg C

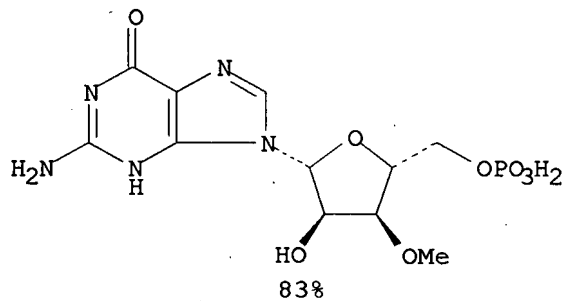
STAGE(2) 2 hours, 0 deg C

STAGE(3) 45 minutes, 0 deg C

RX(1) OF 64



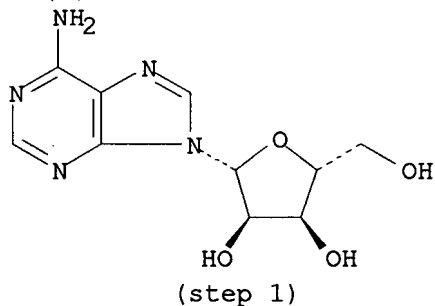
RX(1) OF 64



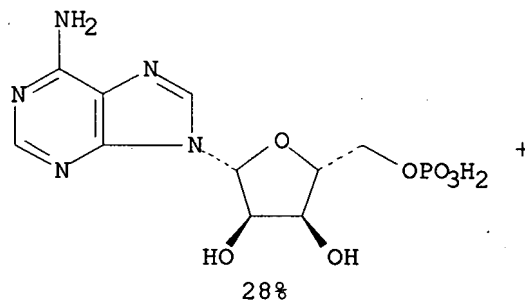
REF: RNA, 9(9), 1108-1122; 2003
CON: 3 hours, 0 deg C

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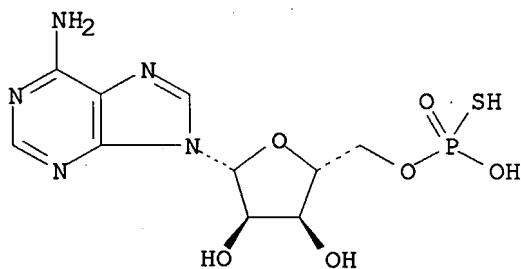
RX(2) OF 4



1. PSCl_3 ,
2,6-Lutidine,
(MeO) $_3\text{PO}$
2. Et $_4\text{N}^+\cdot\text{Br}^-$, Water
3. NaI, Me $_2\text{CO}$



RX(2) OF 4



2 Na
48%

REF: Helvetica Chimica Acta, 86(8), 2827-2832; 2003

CON: STAGE(1) 3 hours, 0 deg C
STAGE(2) 3 hours, 20 deg C

L8 ANSWER 55 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

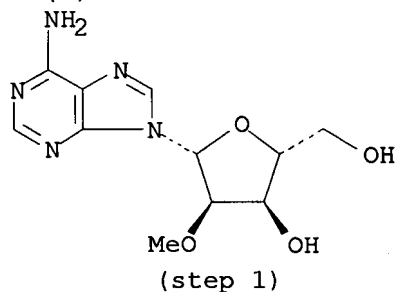
RX(1) OF 2 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 56 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

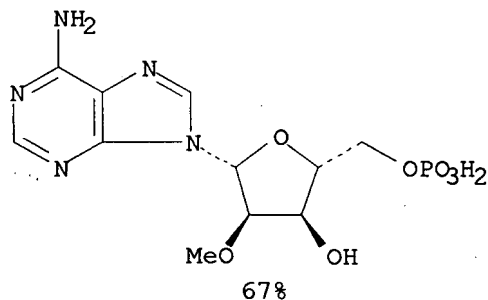
RX(1) OF 3 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 57 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 14



1. (EtO)3P(O)
2. POCl3
3. Water
4. KOH, Water

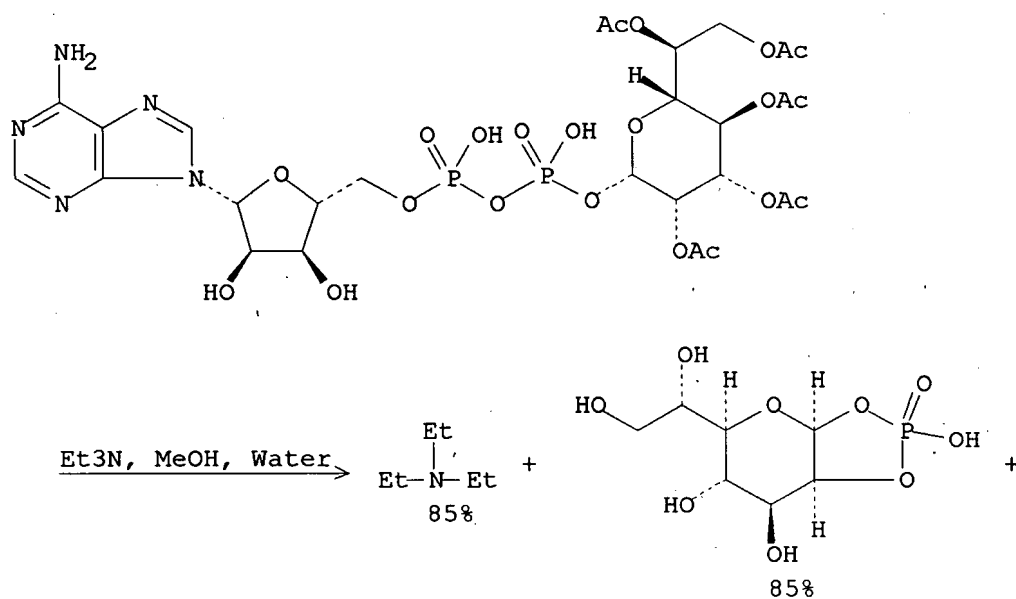


REF: Organic Letters, 6(2), 233-236; 2004

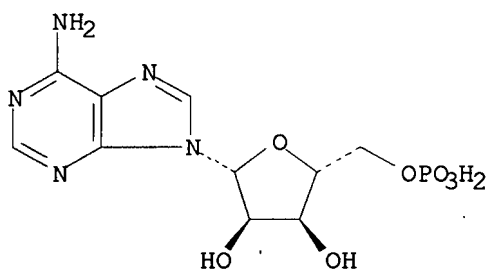
CON: STAGE(1) 5 minutes, room temperature
STAGE(2) 5 hours, 0 deg C
STAGE(3) 1 hour
STAGE(4) pH 7.5

L8 ANSWER 58 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(24) OF 149



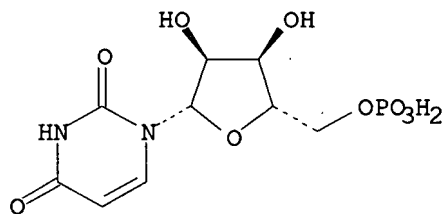
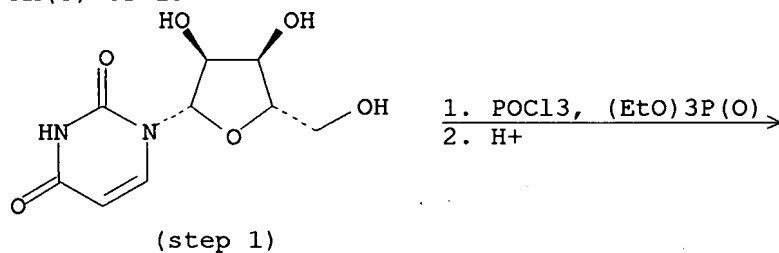
RX(24) OF 149



REF: Carbohydrate Research, 338(23), 2571-2589; 2003
CON: 3 hours, room temperature, pH 12

L8 ANSWER 59 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 29



37%

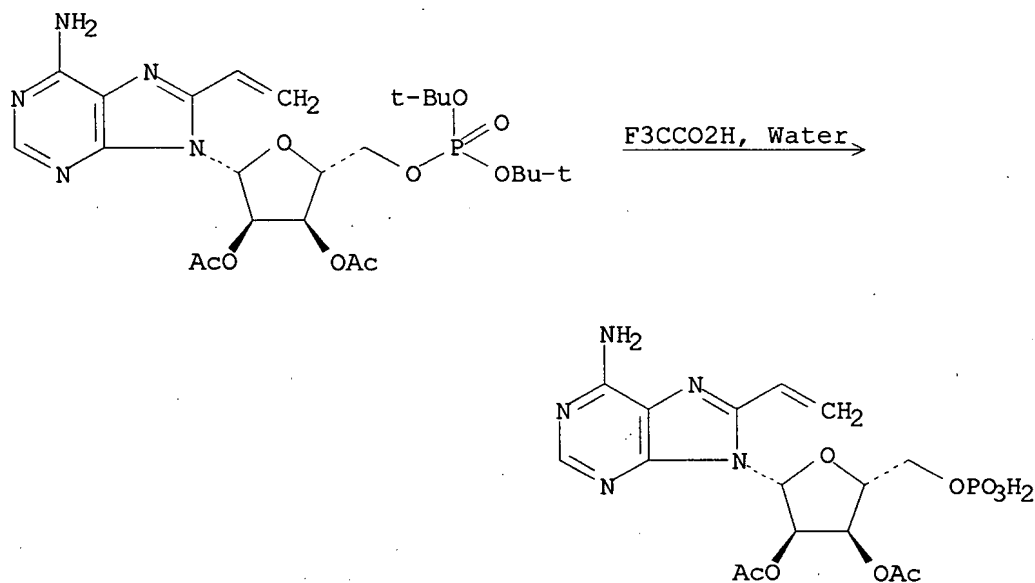
REF: Tetrahedron Letters, 44(47), 8605-8607; 2003
NOTE: cation-exchange resin (H+) used
CON: 22 hours, 0 deg C

L8 ANSWER 60 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 4 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 61 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

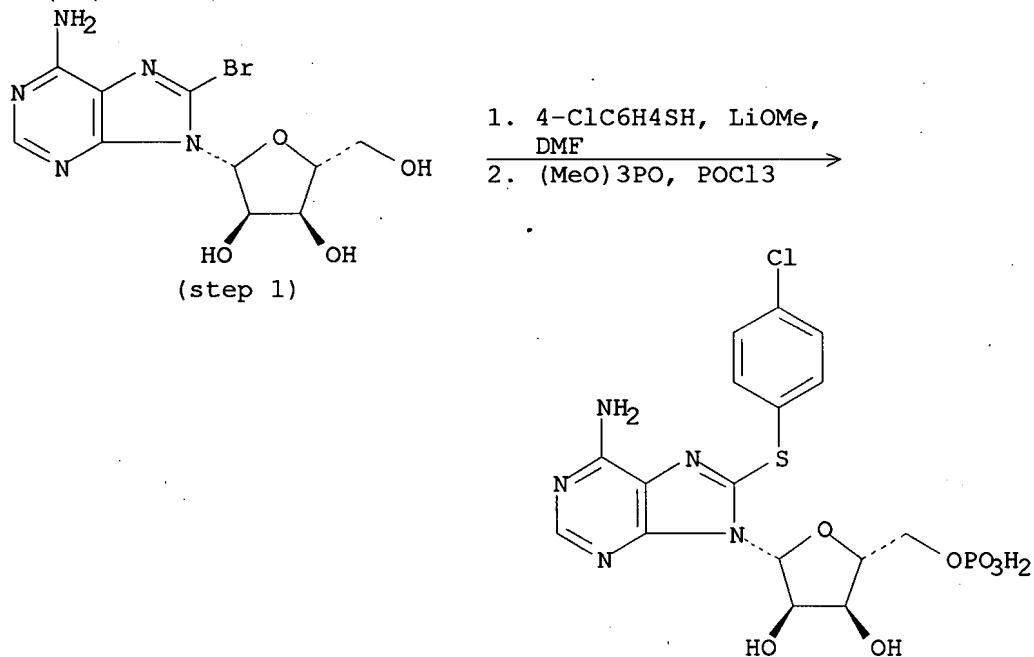
RX(10) OF 46



REF: Tetrahedron, 59(37), 7315-7322; 2003
CON: 10 minutes, 0 deg C

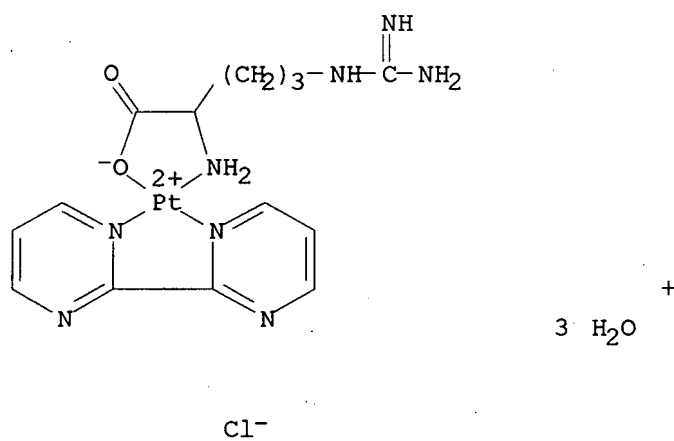
L8 ANSWER 62 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(22) OF 72



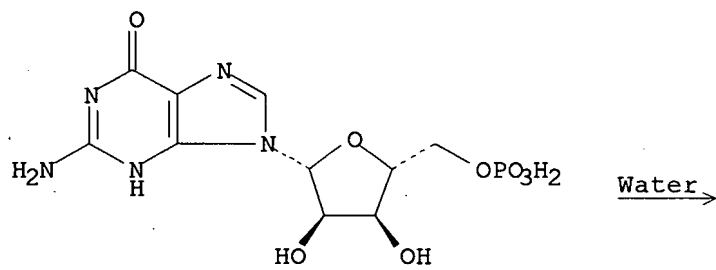
REF: Journal of Medicinal Chemistry, 46(20), 4322-4332; 2003
CON: STAGE(1) 4 hours, 60 deg C
STAGE(2) overnight, 0 deg C

RX(7) OF 29



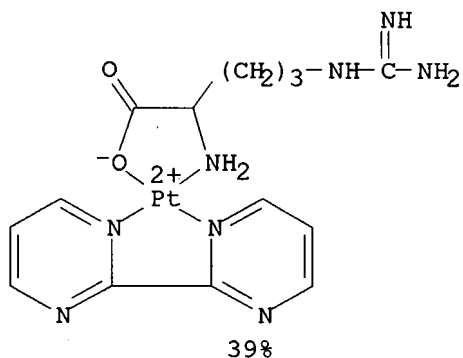
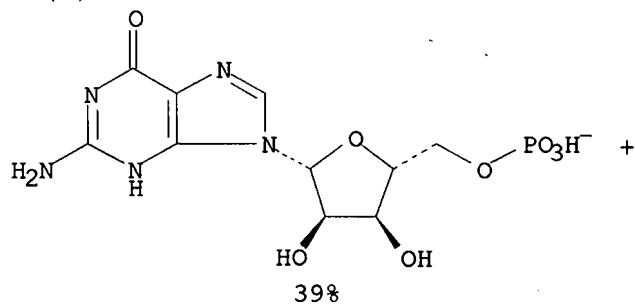
HCl

RX(7) OF 29



2 Na

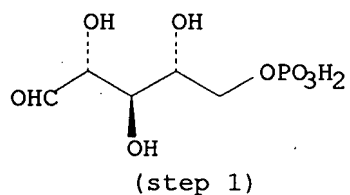
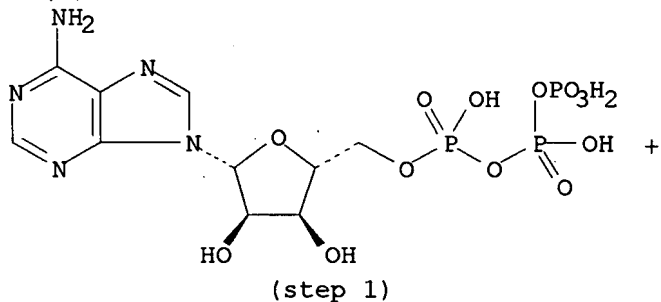
RX(7) OF 29



REF: Chemistry--A European Journal, 9(14), 3341-3352; 2003
CON: overnight, room temperature

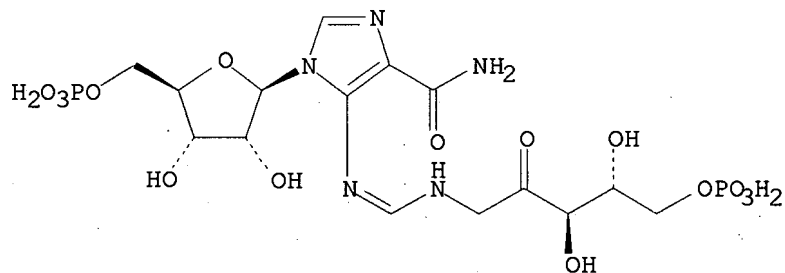
L8 ANSWER 64 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 9



1. C:9001-59-6,
C:9013-02-9,
C:9015-83-2,
Phosphoenolpyruvate,
EDTA, NaCl, MgCl₂,
Water
2. C:9024-82-2, Water
3. C:9001-59-6,
R:58-64-0, Water

RX(1) OF 9



658

REF: Biochemistry, 42(23), 7013-7022; 2003

NOTE: potassium phosphate and Tris HCl buffered soln., HisAGIE ext. used in stage 2, biotransformation, enzymic

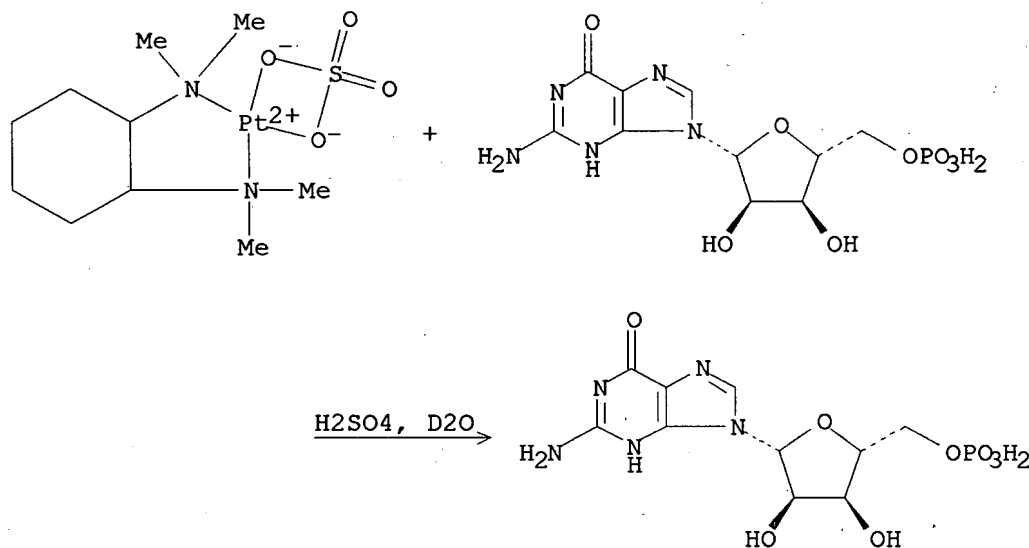
CON: STAGE(1) 45 minutes; 30 deg C, pH 7.6

STAGE(2) 2 hours, 30 deg C, pH 7.6

STAGE(3) 30 minutes, 30 deg C, pH 7.6

L8 ANSWER 65 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(5) OF 36

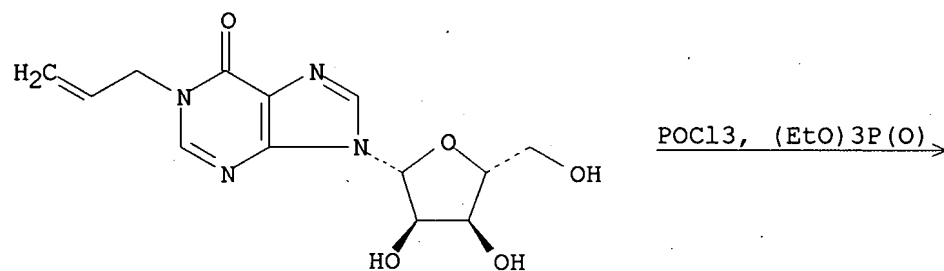


REF: Dalton Transactions, (5), 872-879; 2003

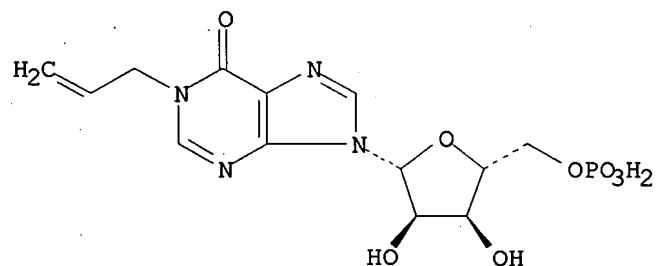
CON: 22 deg C, pH 3

L8 ANSWER 66 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 102



RX(2) OF 102

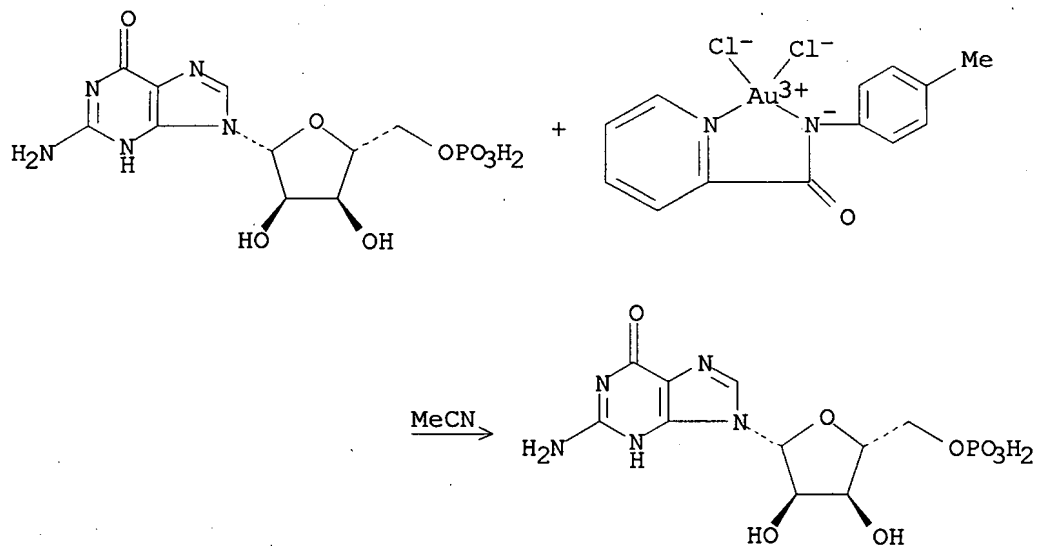


2 NH₃
83%

REF: Journal of Medicinal Chemistry, 46(10), 1878-1885; 2003
NOTE: literature prepn.

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RX(2) OF 3



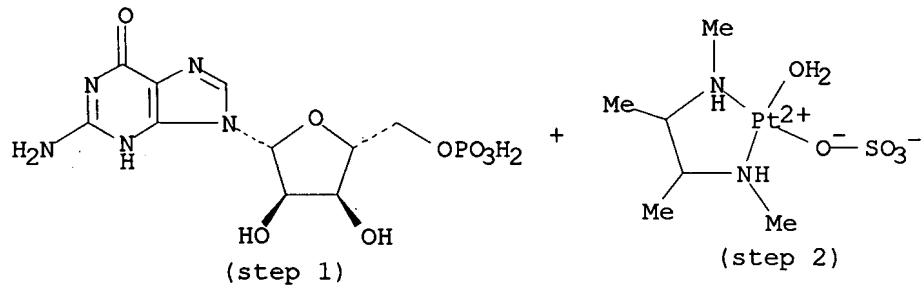
REF: Wuji Huaxue Xuebao, 19(1), 45-48; 2003

NOTE: product is complexed with gold pyridinecarboxamide

CON: 4 days, room temperature

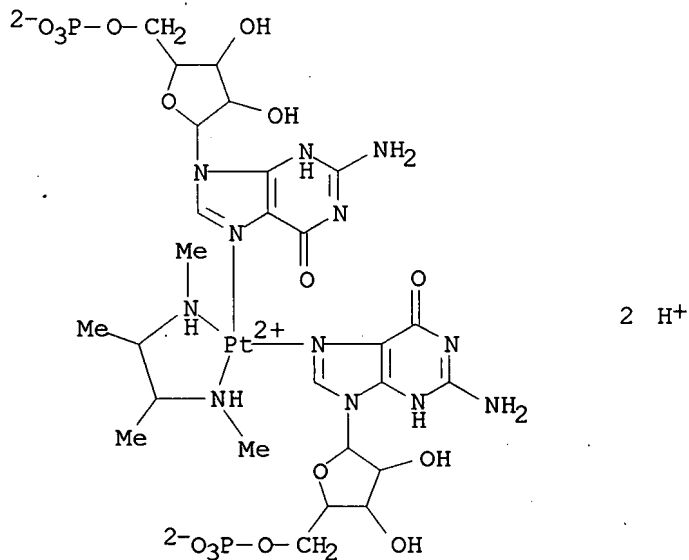
L8 ANSWER 68 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 3



1. R:13587-52-5, D2O

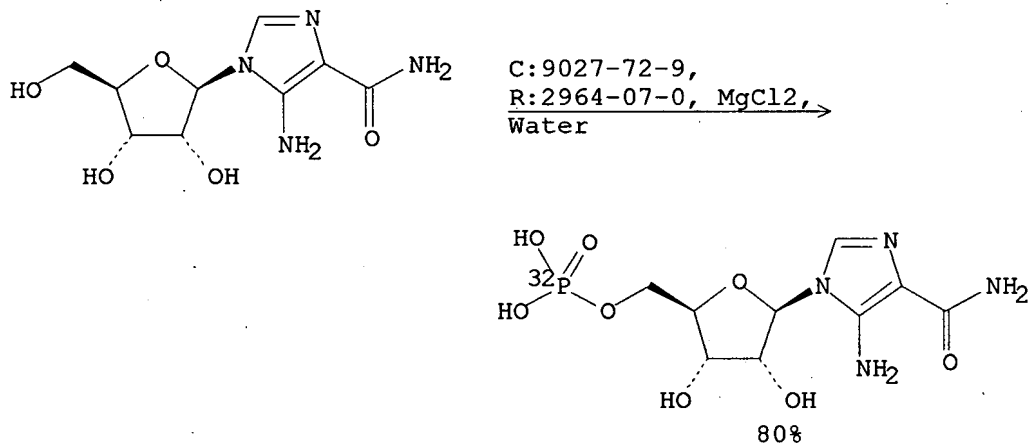
RX(3) OF 3



REF: Inorganic Chemistry, 42(4), 997-1005; 2003
CON: pH 3 - 4

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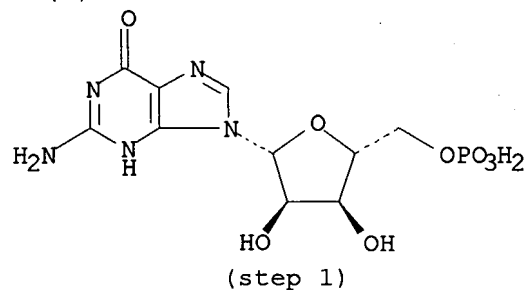
RX(1) OF 6



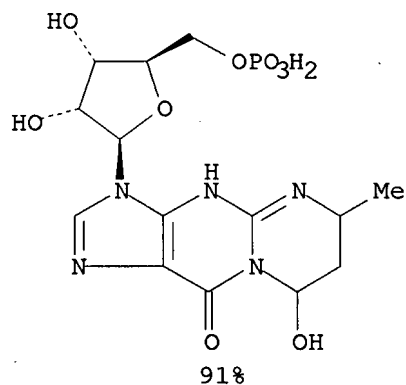
REF: Journal of Labelled Compounds & Radiopharmaceuticals, 45(13), 1097-1102; 2002
NOTE: biotransformation, enzymic, Adenosine kinase used, Bovine serum albumin used, buffered soln.
CON: STAGE(1) 2 - 2.5 hours, 37 deg C, pH 7.8; -80 deg C

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RX(5) OF 5



1. 2-Butenal,
R:74-79-3, Water
2. HCl, Water
3. Et2O



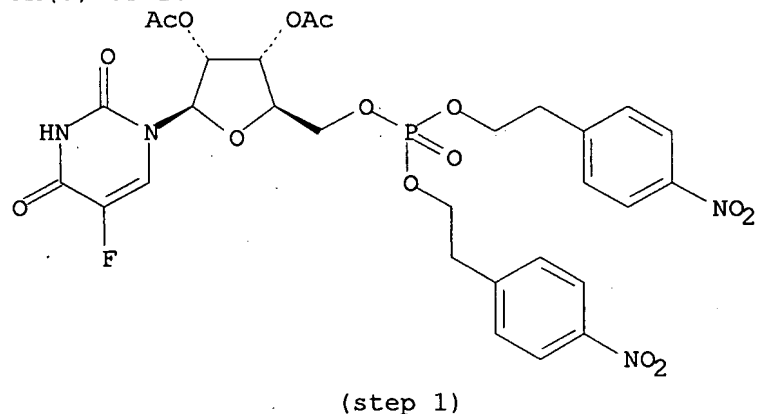
REF: Tetrahedron, 58(42), 8413-8416; 2002

NOTE: stereoselective, buffered soln.

CON: 2 hours, 50 deg C, pH 8

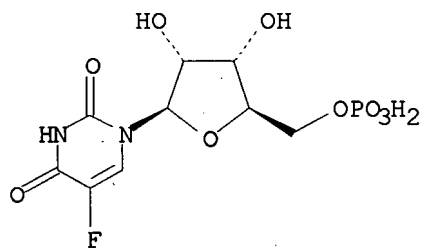
L8 ANSWER 71 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 20



1. DBU, Pyridine
2. NH3, MeOH

RX(3) OF 20

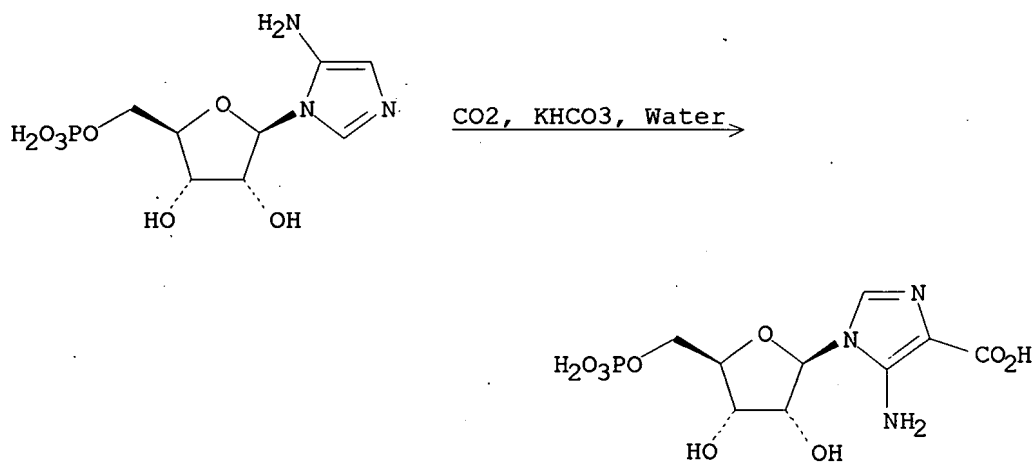


568

REF: Collection Symposium Series, 5 (Chemistry of Nucleic Acid Components), 312-315; 2002
CON: >1 hour, 20 deg C

L8 ANSWER 72 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

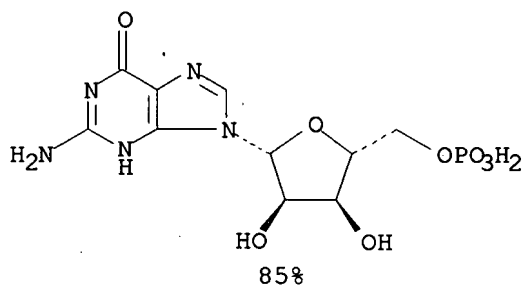
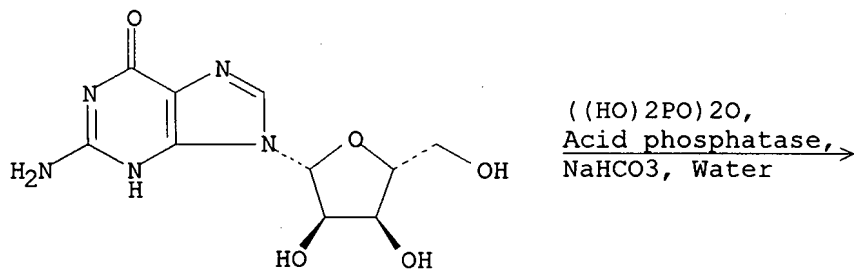
RX(4) OF 5



REF: Vestnik Sankt-Peterburgskogo Universiteta, Seriya 4: Fizika, Khimiya, (4), 98-106; 2001
CON: 2 minutes, 37 deg C

L8 ANSWER 73 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



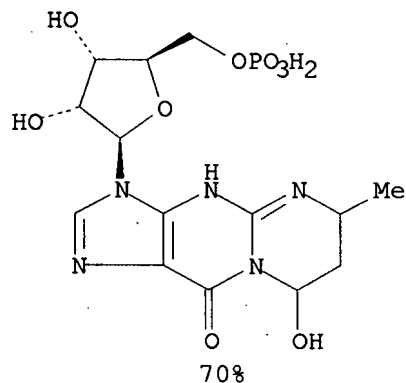
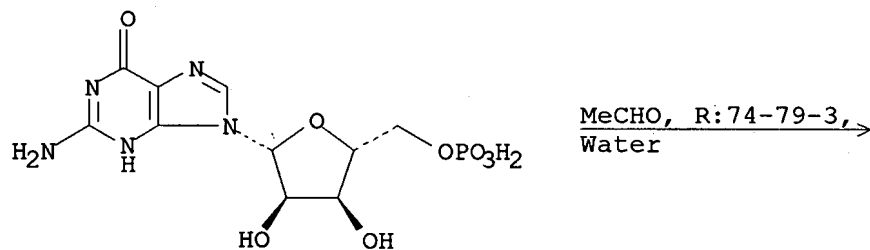
REF: Jpn. Kokai Tokkyo Koho, 2003024094, 28 Jan 2003
NOTE: optimization study, biotransformation, enzymic
CON: 14 hours, 35 deg C, pH 4.5

L8 ANSWER 74 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 14 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 75 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

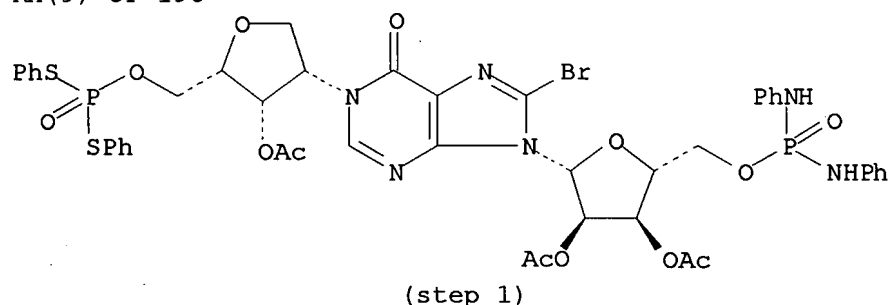
RX(3) OF 5



REF: Tetrahedron Letters, 43(38), 6701-6703; 2002
NOTE: stereoselective, phosphate buffer
CON: 8 hours, 37 deg C

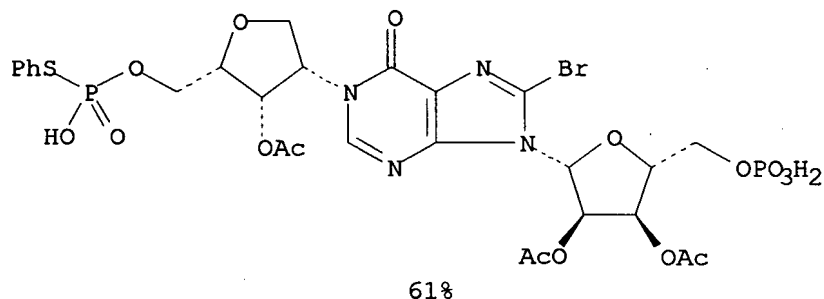
L8 ANSWER 76 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(9) OF 196



1. Ac₂O, Pyridine, AcOH
 2. Phosphinic acid, Et₃N, Pyridine
 3. Water, CHCl₃
 4. Et₃N.AcOH, Water
- Et-N-Et +
61%

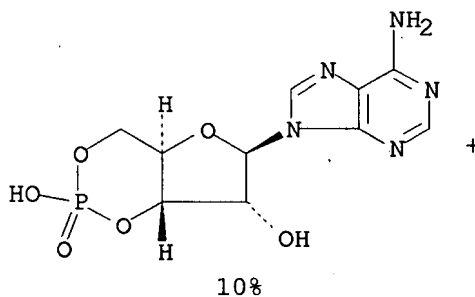
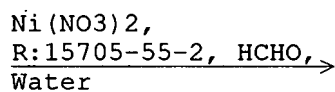
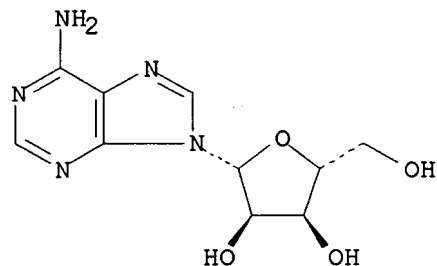
RX(9) OF 196



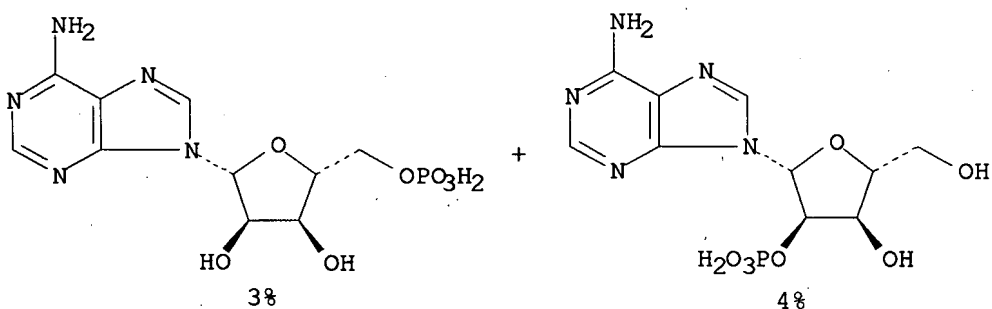
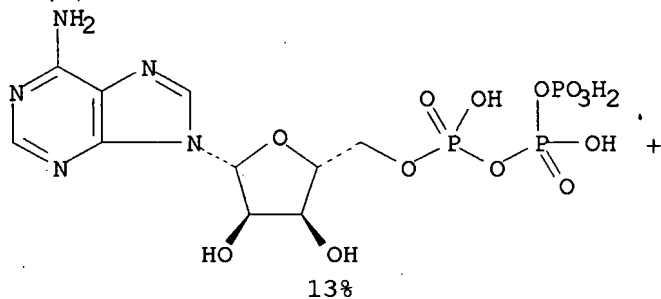
REF: Journal of Medicinal Chemistry, 45(24), 5340-5352; 2002
NOTE: stereoselective
CON: STAGE(1) 8 hours, room temperature
STAGE(2) 11 hours, room temperature
STAGE(3) room temperature
STAGE(4) room temperature

L8 ANSWER 77 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



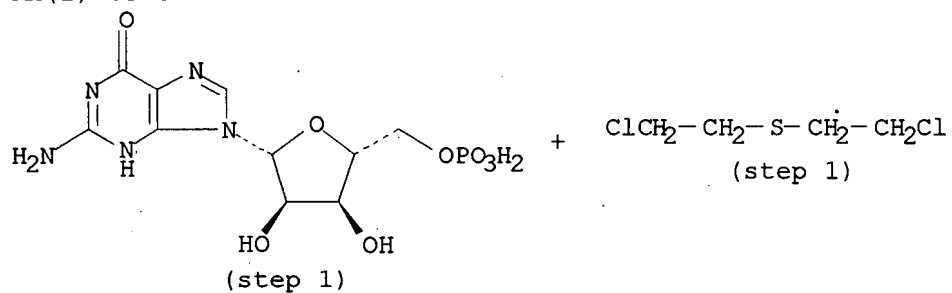
RX(1) OF 2



REF: Origins of Life and Evolution of the Biosphere, 32(3), 219-224; 2002

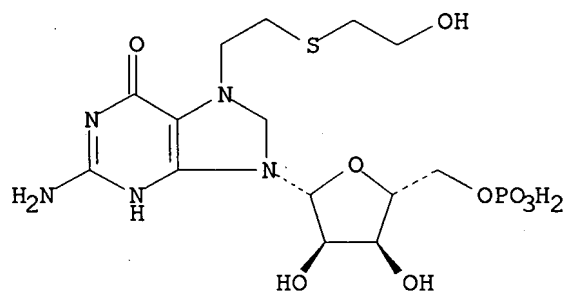
NOTE: 31% overall yield, alternative reaction conditions shown

RX(1) OF 3



1. HCl, Water
2. NaOH, Water
3. NaOH, Water

RX(1) OF 3



Cl⁻

REF: Canadian Journal of Chemistry, 80(5), 504-509; 2002

NOTE: regioselective

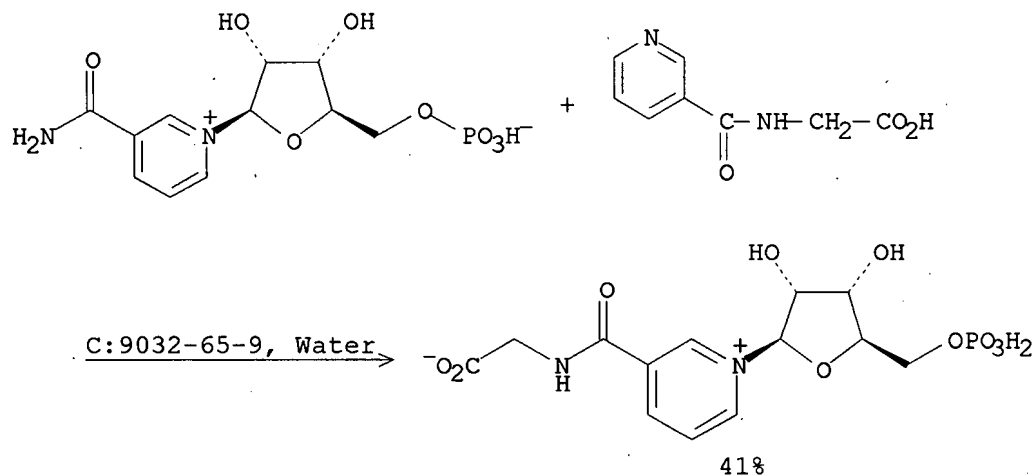
CON: STAGE(1) room temperature, pH 4.5

STAGE(2) 9 hours, room temperature, pH 4.5

STAGE(3) 10 minutes, room temperature, neutralized

L8 ANSWER 79 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 25

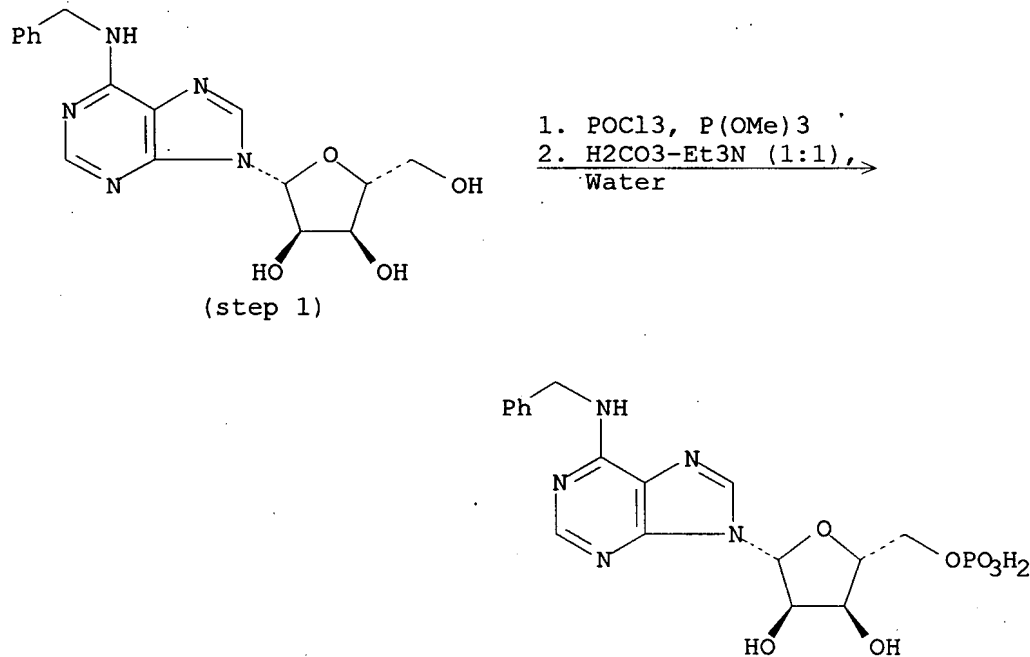


REF: Journal of Nutritional Science and Vitaminology, 48(3), 177-183; 2002

NOTE: enzymic, biotransformation, buffered soln. Tris-Maleate ph 6.5, Rabbit spleen NAD glycohydrolase used

L8 ANSWER 80 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 6

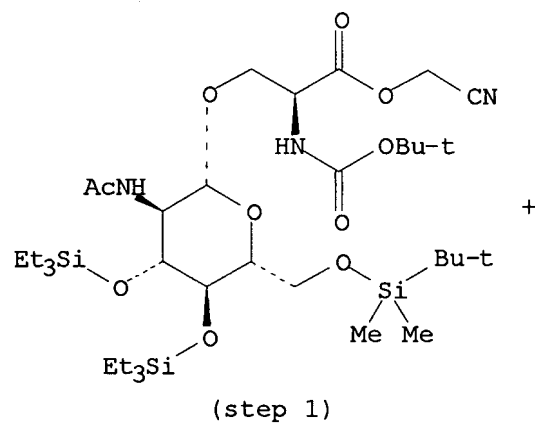


REF: Chemistry & Biology, 9(1), 35-47; 2002

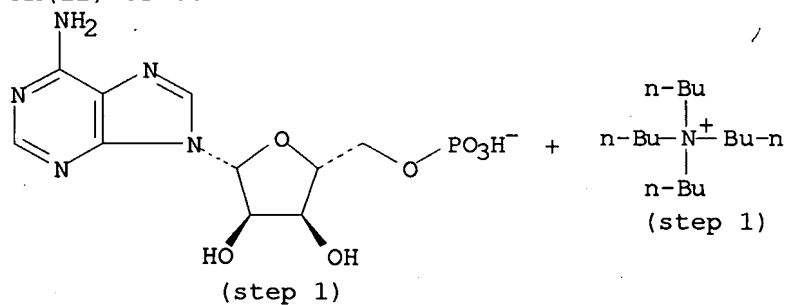
L8 ANSWER 81 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3 - REACTION DIAGRAM NOT AVAILABLE

RX(12) OF 66

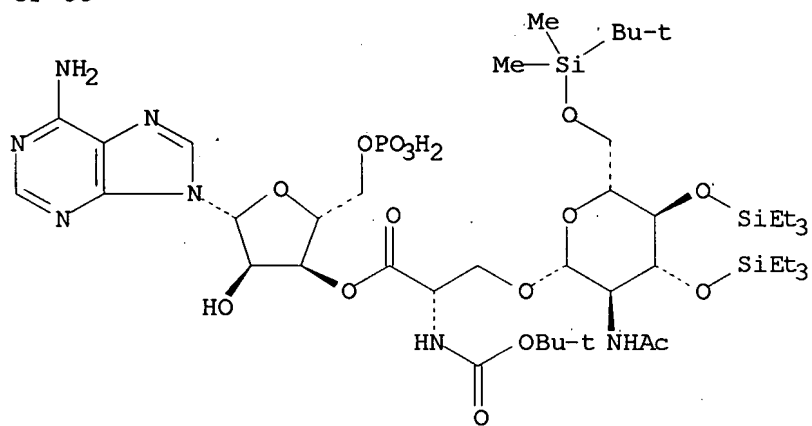


RX(12) OF 66



1. DMF
2. AcOH, DMF, Water

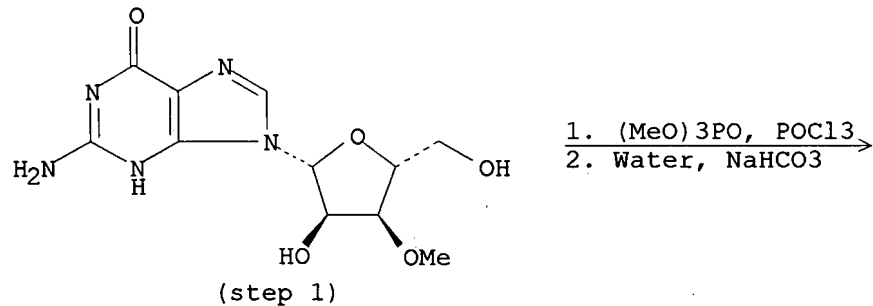
RX(12) OF 66



448

REF: Bioorganic & Medicinal Chemistry, 10(3), 573-581; 2002
NOTE: regioselective

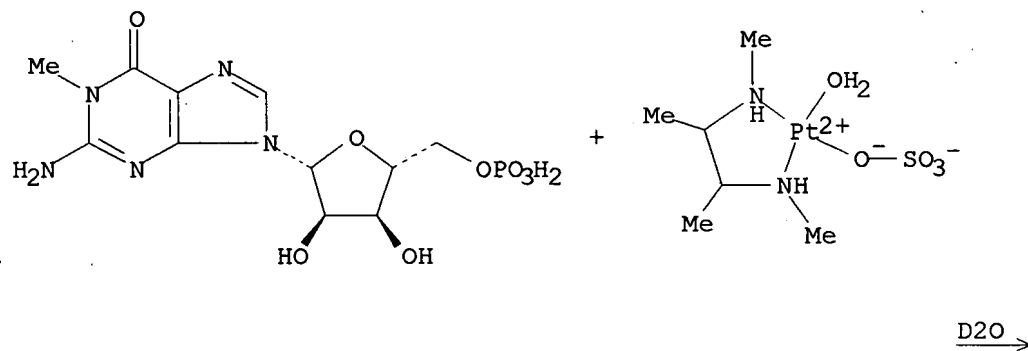
RX(2) OF 20



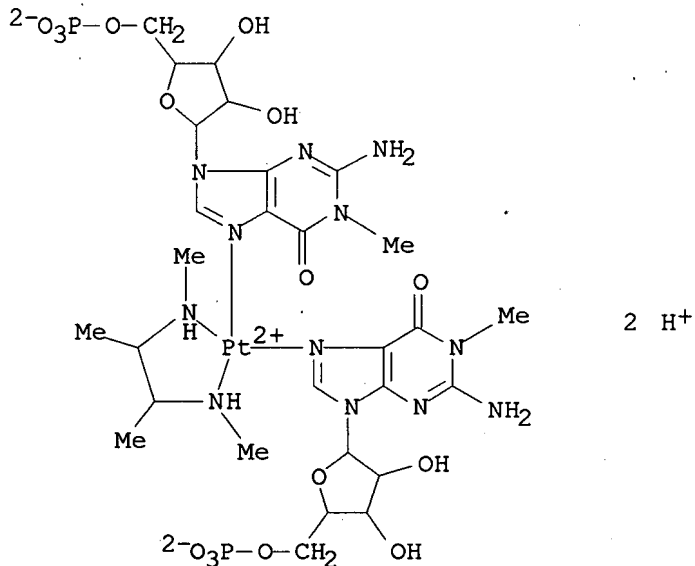
REF: RNA, 7(10), 1486-1495; 2001

NOTE: no solvent

RX(1) OF 4



RX(1) OF 4

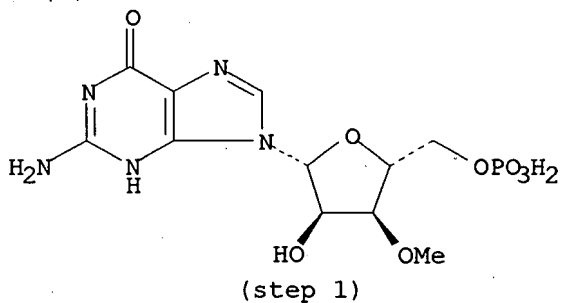


REF: Inorganic Chemistry, 41(3), 546-557; 2002

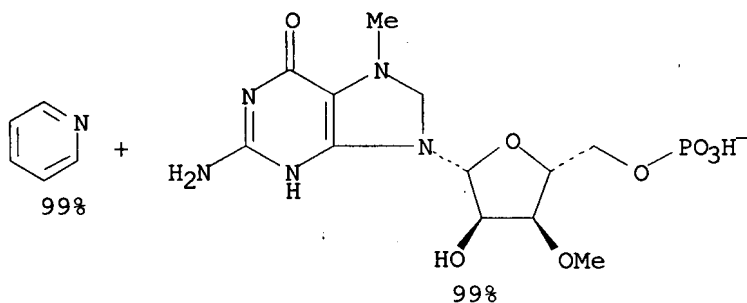
NOTE: atropoisomerism studied

L8 ANSWER 85 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 9



1. Pyridine, MeI,
Me2COHCH2CHOHMe
2. Pyridine,
DOWEX 50W, Water

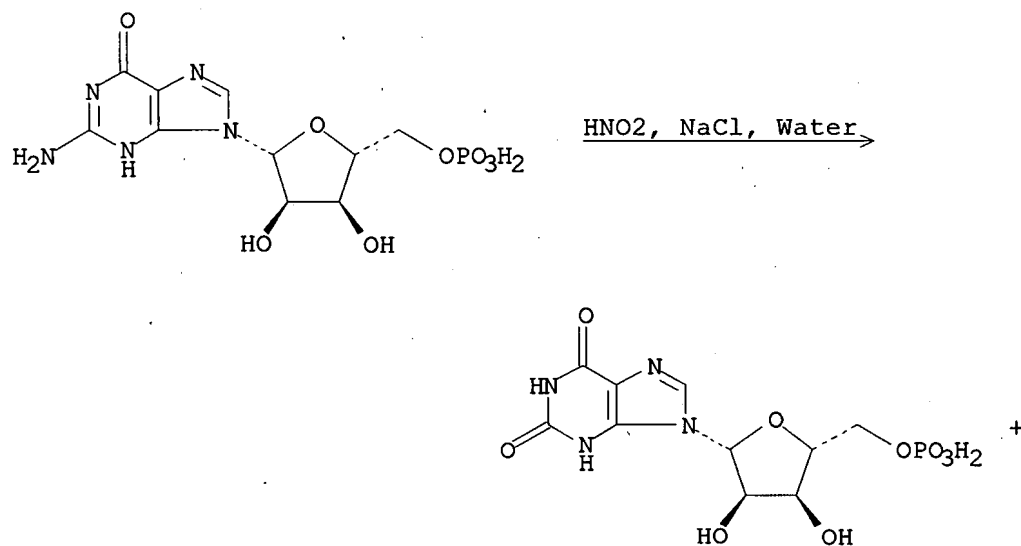


REF: Organic Letters, 4(2), 161-164; 2002

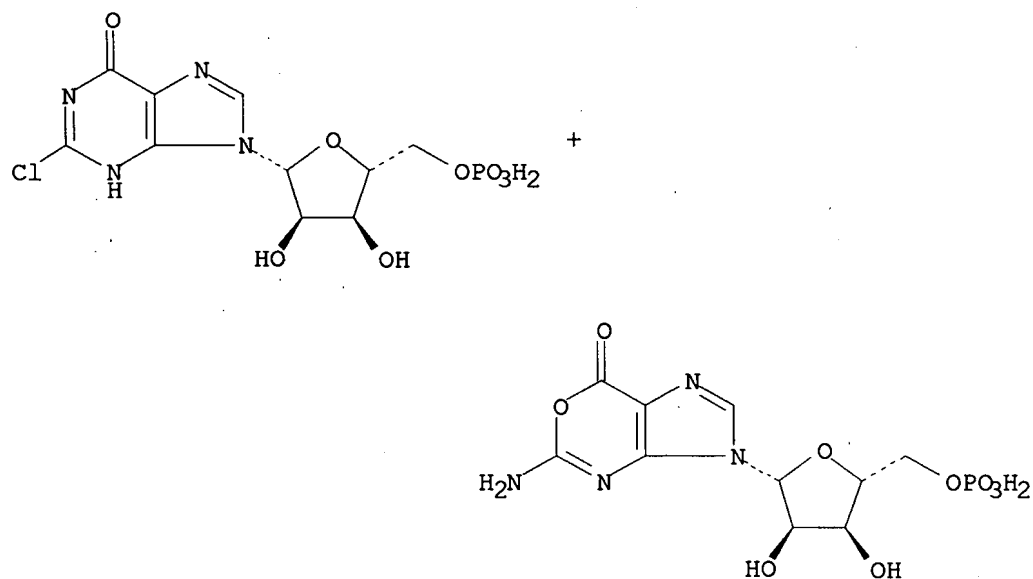
NOTE: in the dark, regioselective, Dowex 50W-X8 resin (pyridinium form) used stage 2

L8 ANSWER 86 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 4



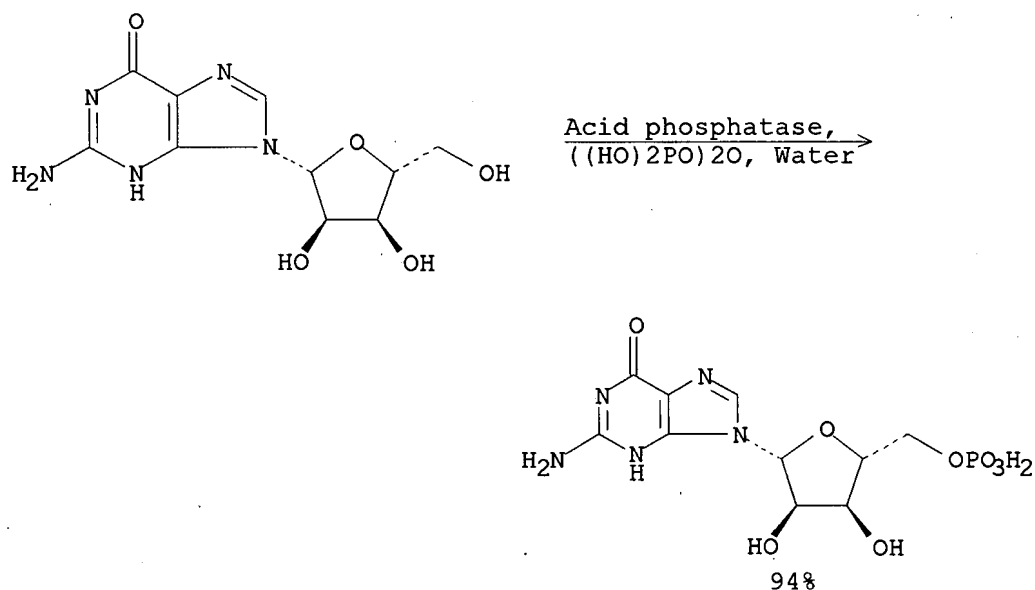
RX(3) OF 4



REF: Bioorganic & Medicinal Chemistry, 9(11), 2937-2941; 2001
NOTE: buffered soln.

L8 ANSWER 87 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3

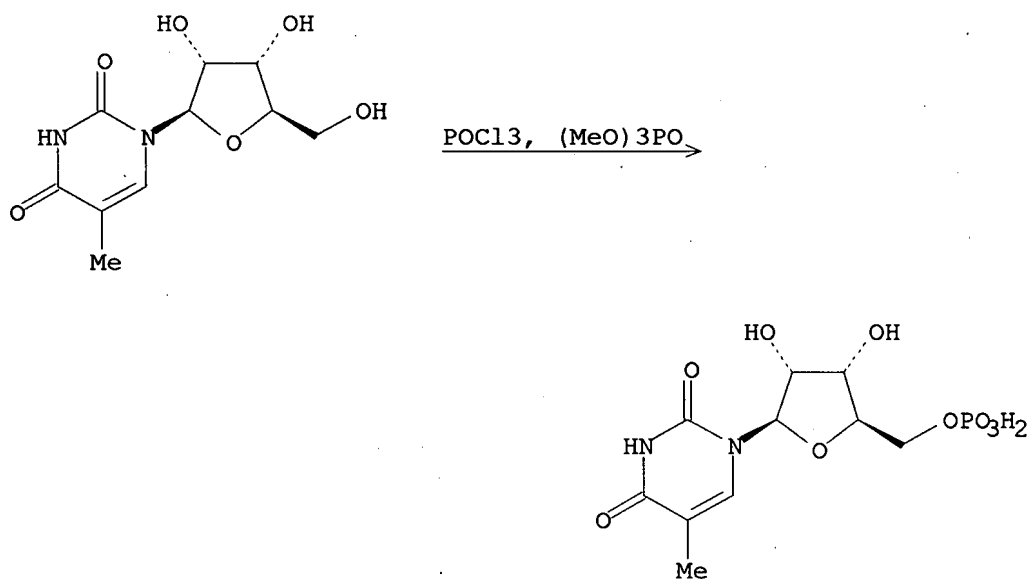


REF: Jpn. Kokai Tokkyo Koho, 2002000289, 08 Jan 2002

NOTE: biotransformation, enzymic, guanosine crystal pulverized to a size having sp. surface area of 0.8 m²/g

L8 ANSWER 88 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 8

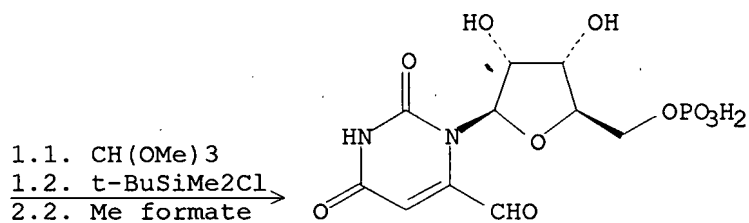
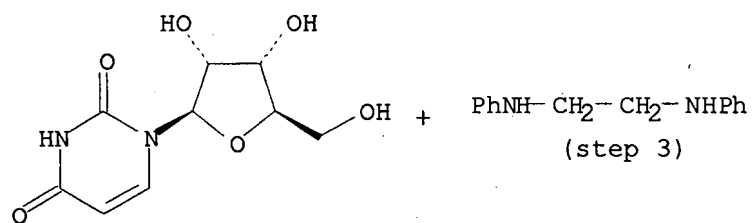


REF: Biochemistry, 40(47), 14260-14267; 2001

NOTE: stereoselective

L8 ANSWER 89 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(15) OF 15 - 5 STEPS



2 NH₃

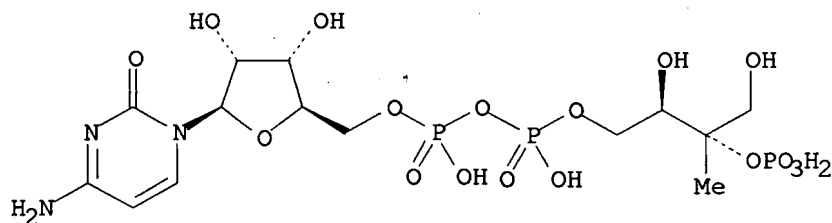
75%

REF: Nucleosides, Nucleotides & Nucleic Acids, 20(4-7), 1003-1006;
2001

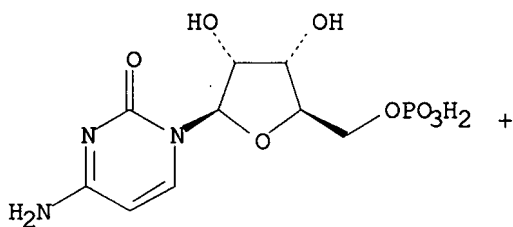
NOTE: 1) stereoselective, 5) regioselective, stereoselective

L8 ANSWER 90 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

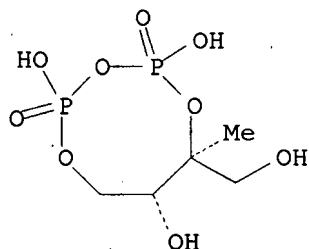
RX(1) OF 1



C:287480-92-6, Mg,
Water



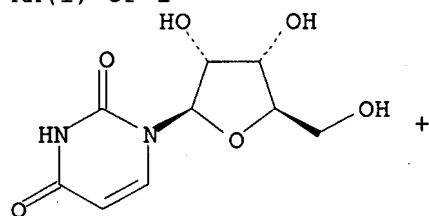
RX(1) OF 1



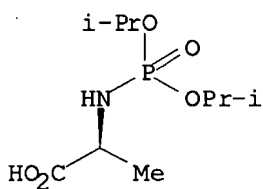
REF: PCT Int. Appl., 2001057223, 09 Aug 2001
NOTE: biotransformation, enzymic, buffered soln.

L8 ANSWER 91 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1

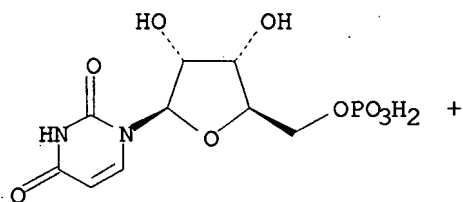


(step 1)

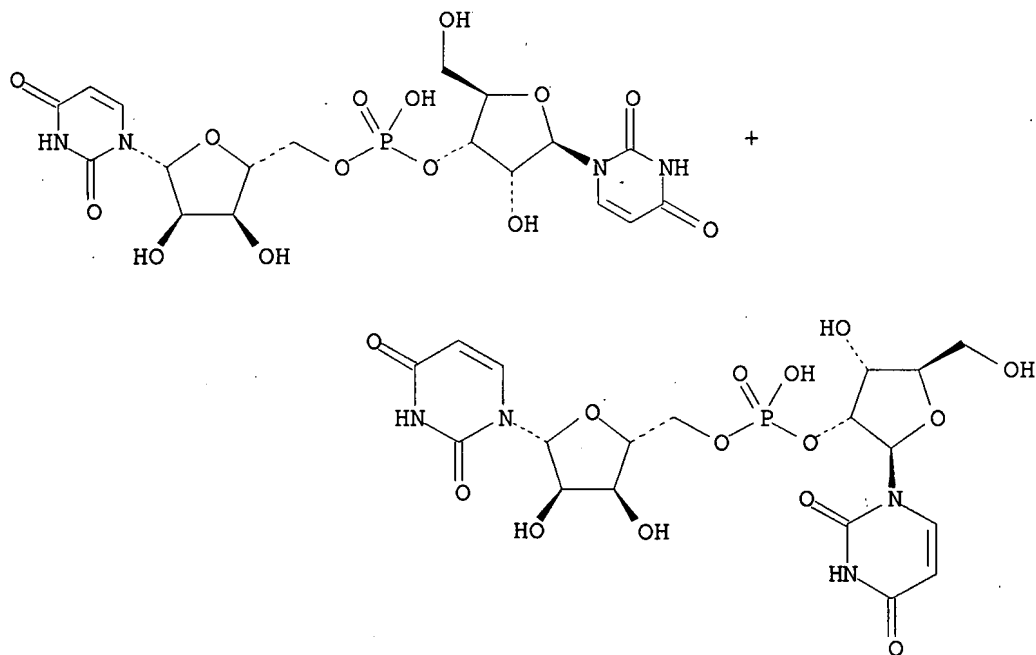


(step 2)

1. R:350599-92-7,
Water
2. NaHCO₃, Water
3. Water



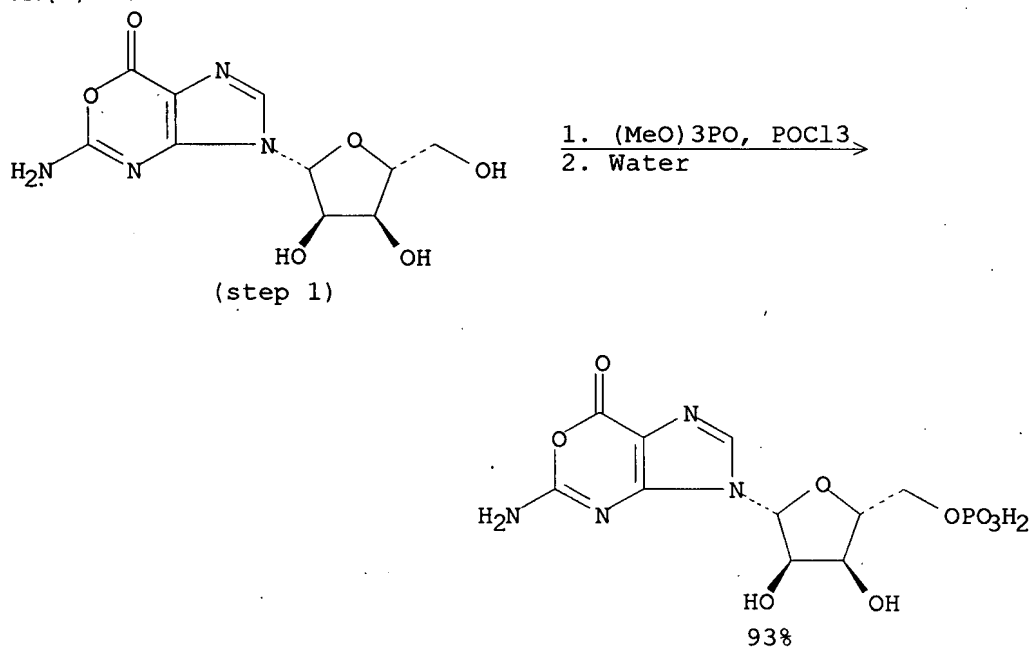
RX(1) OF 1



REF: Chinese Chemical Letters, 12(4), 313-316; 2001
NOTE: photochem. first stage

L8 ANSWER 92 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

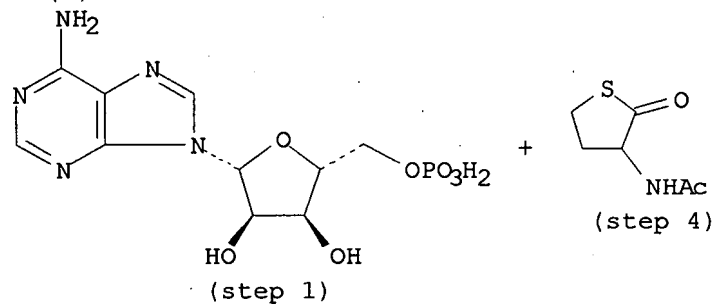
RX(2) OF 52



REF: Journal of the Chemical Society, Perkin Transactions 1, (3),
298-304; 2001
NOTE: stereoselective

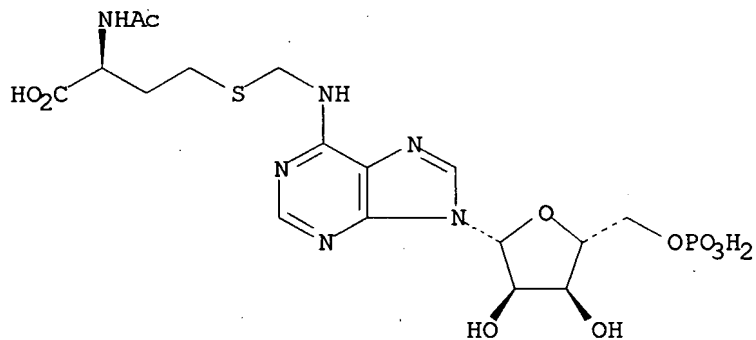
L8 ANSWER 93 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 12



1. AcOH, AcOEt, EtOH
2. HCl
3. EtOH
4. HCHO, AcOH

RX(2) OF 12

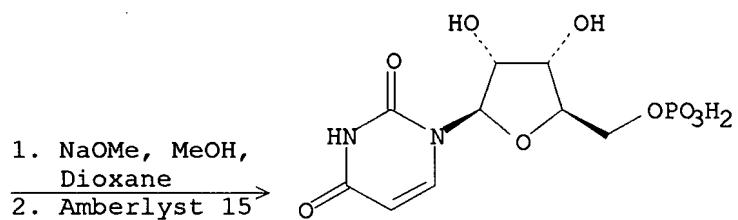
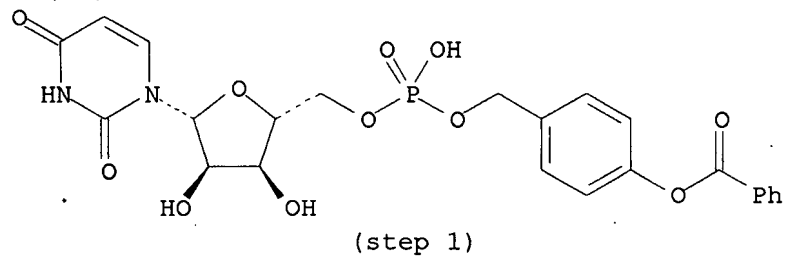


67%

REF: Journal of the American Chemical Society, 123(5), 976-977; 2001
NOTE: stereoselective

L8 ANSWER 94 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(16) OF 88



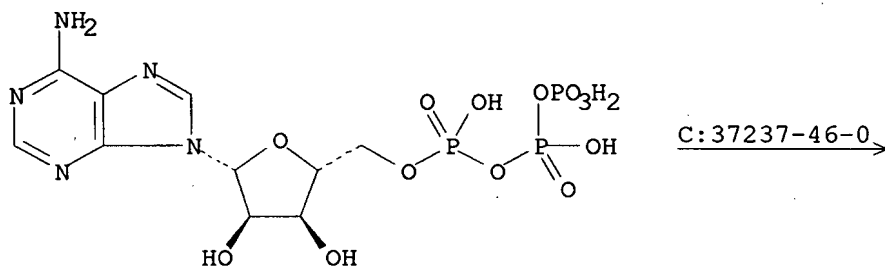
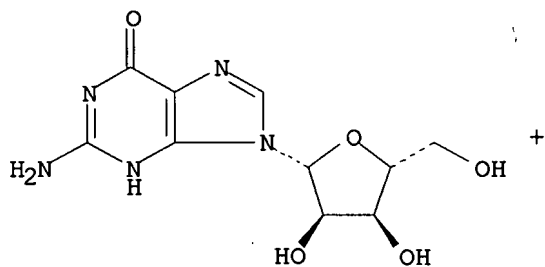
2 Na
67%

REF: Organic Letters, 3(2), 307-309; 2001

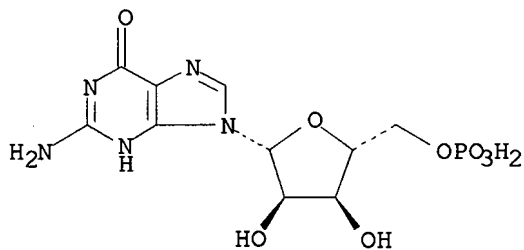
NOTE: solid supported reaction

L8 ANSWER 95 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



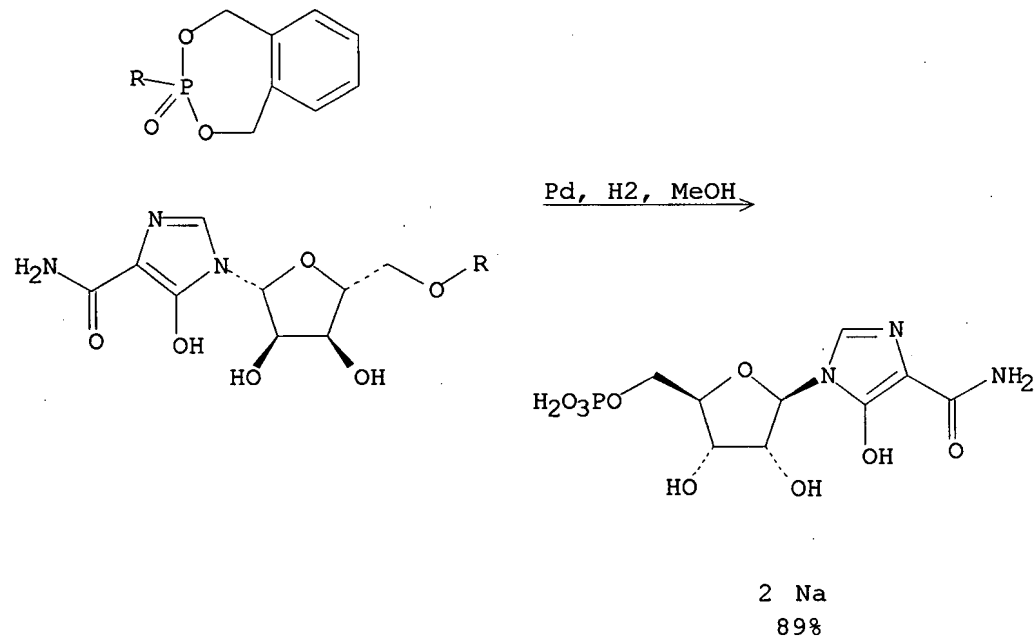
RX(1) OF 1



REF: Bioscience, Biotechnology, and Biochemistry, 64(10), 2259-2261; 2000

L8 ANSWER 96 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

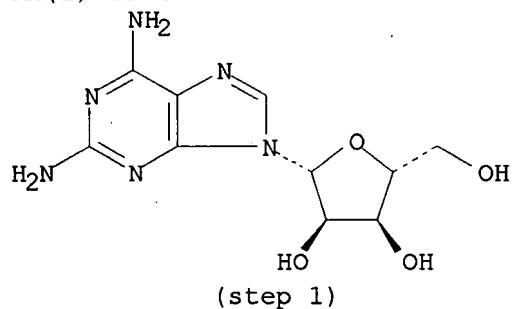
RX(1) OF 66



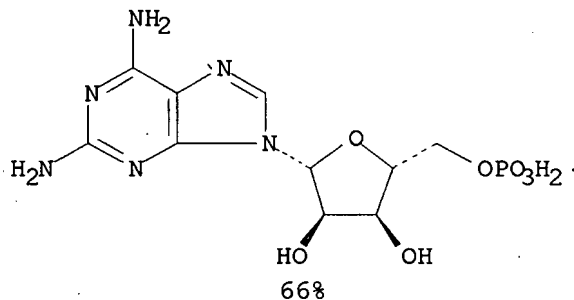
REF: Perkin 1, (21), 3603-3609; 2000

L8 ANSWER 97 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 4



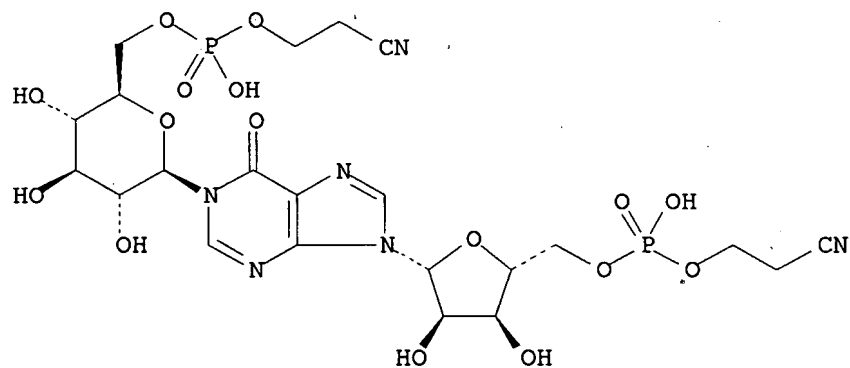
1. POCl₃, (EtO)₃P(O)
2. Water
3. LiOH, Water
4. Me₂CO



REF: Helvetica Chimica Acta, 83(9), 2541-2549; 2000

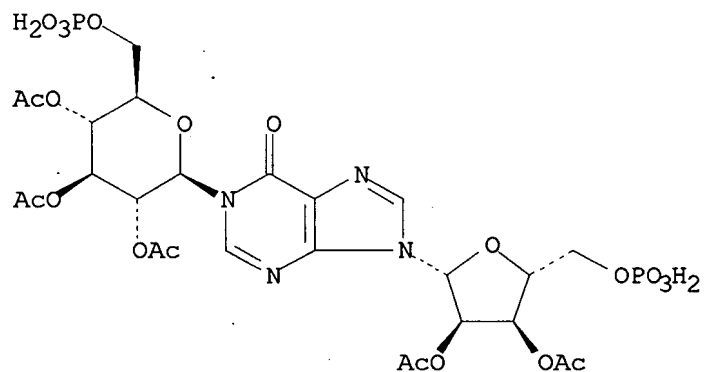
L8 ANSWER 98 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(14) OF 46



Ac₂O, Pyridine

RX(14) OF 46

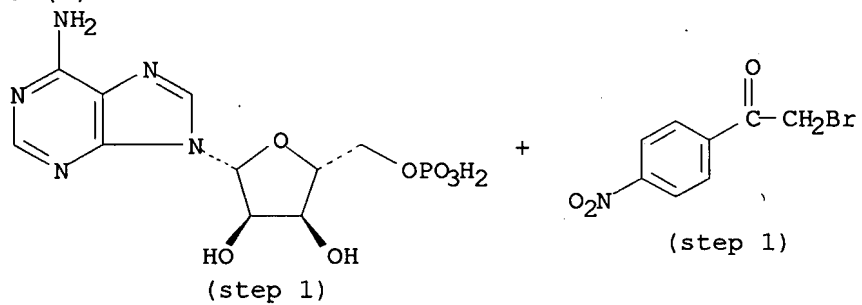


REF: Nucleosides, Nucleotides & Nucleic Acids, 19(8), 1289-1299;
2000

NOTE: stereoselective

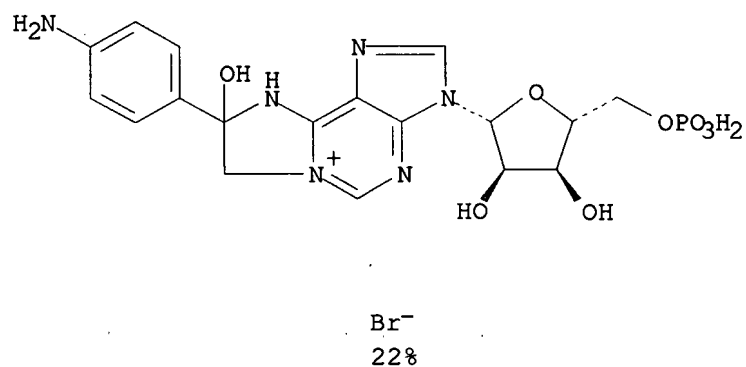
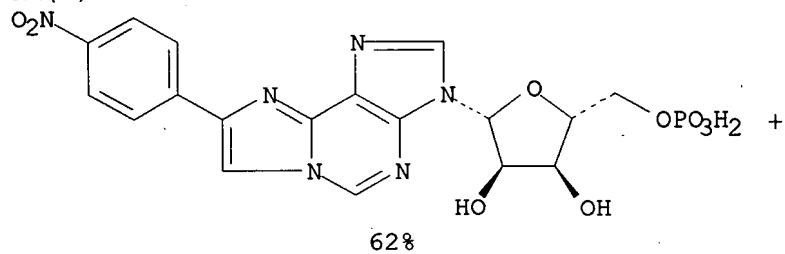
L8 ANSWER 99 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 8



1. DBU, DMSO
2. DBU, Me₂CO, Water

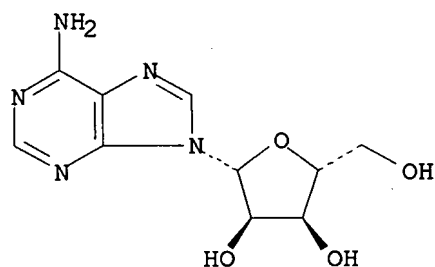
RX(1) OF 8



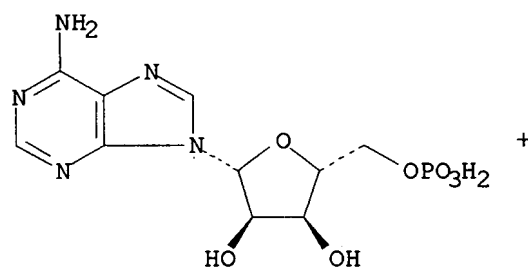
REF: Nucleosides, Nucleotides & Nucleic Acids, 19(5 & 6), 1033-1054; 2000

L8 ANSWER 100 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

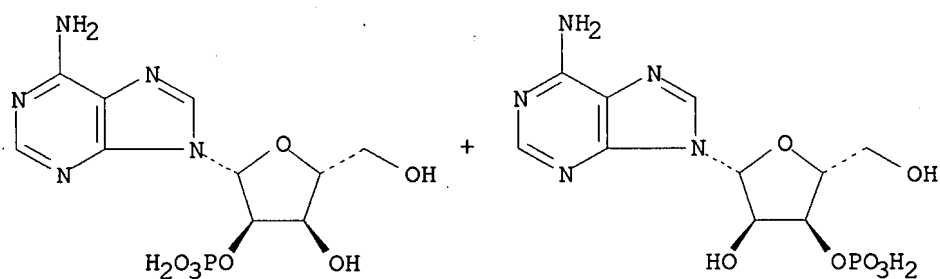
RX(1) OF 4



R:110484-60-1,
R:134873-51-1, Water



RX(1) OF 4

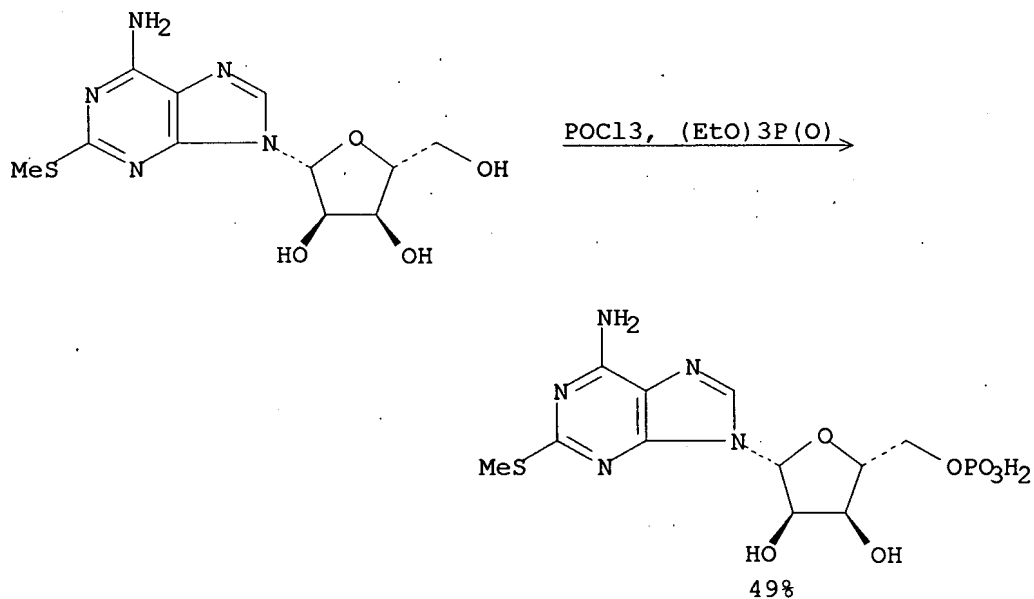


REF: Chinese Chemical Letters, 11(5), 407-408; 2000

NOTE: 33% OVERALL CONVERSION

L8 ANSWER 101 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

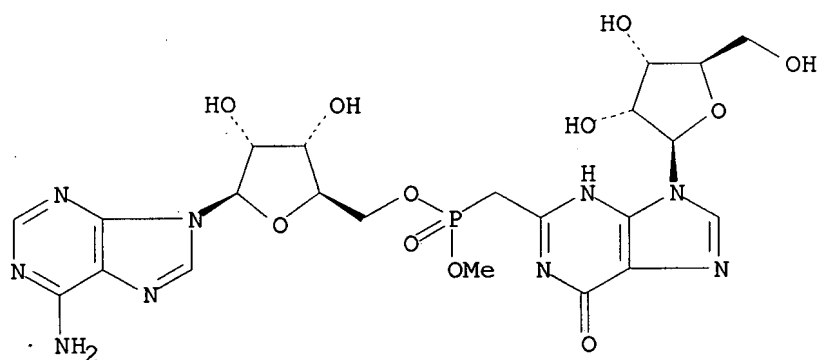
RX(3) OF 6



REF: Bioorganicheskaya Khimiya, 25(9), 702-707; 1999

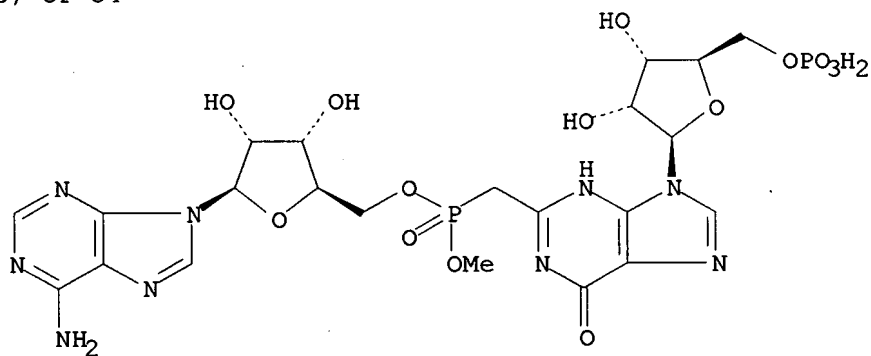
L8 ANSWER 102 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(13) OF 54



$\xrightarrow[\text{Water}]{\text{F3CCO}_2\text{H}, \text{POCl}_3, \text{PPh}_3}$

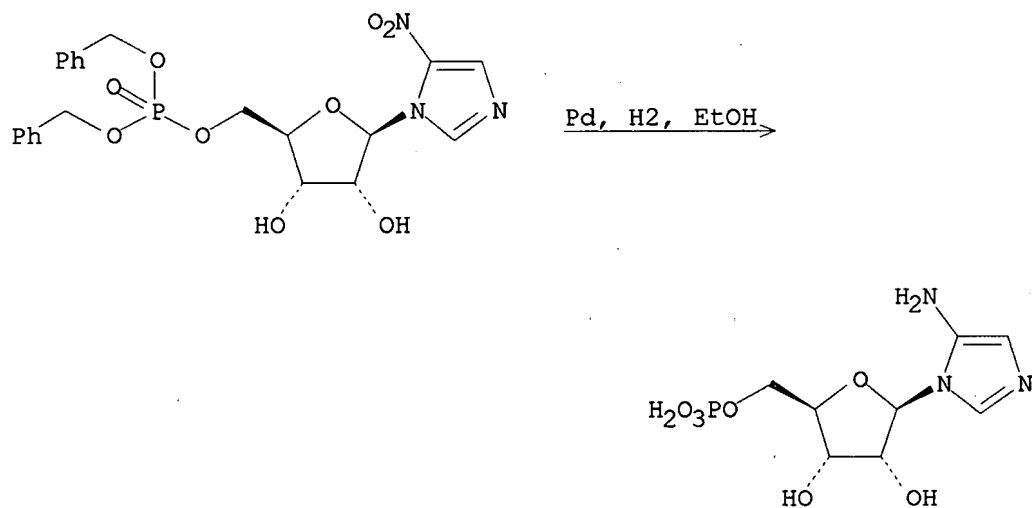
RX(13) OF 54



2 NH₃
35%

REF: Synlett, (Spec.), 897-900; 1999
NOTE: STEREOSELECTIVE

RX(14) OF 73



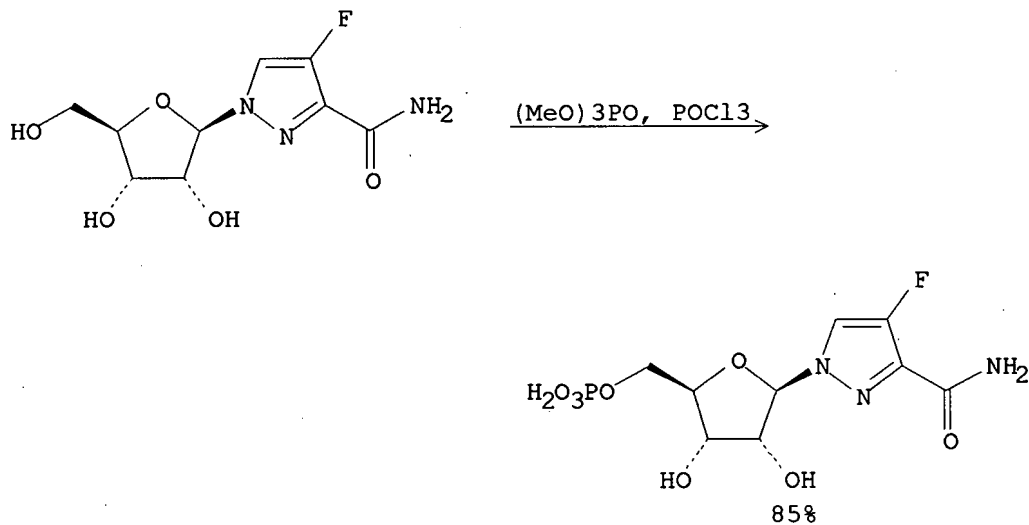
REF: Synthesis, (6), 985-992; 1999

L8 ANSWER 104 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(4) OF 10 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 105 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

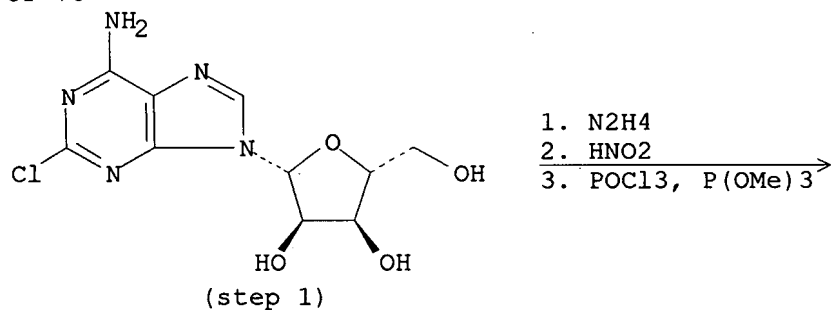
RX(7) OF 15



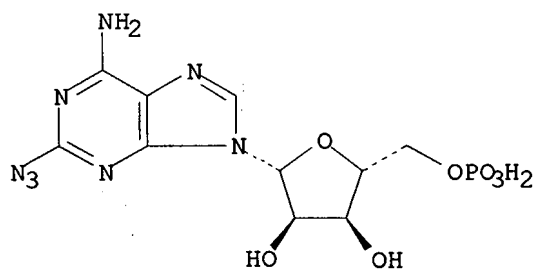
REF: Nucleosides & Nucleotides, 18(2), 203-216; 1999
NOTE: 6 H

L8 ANSWER 106 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(4) OF 78



RX(4) OF 78

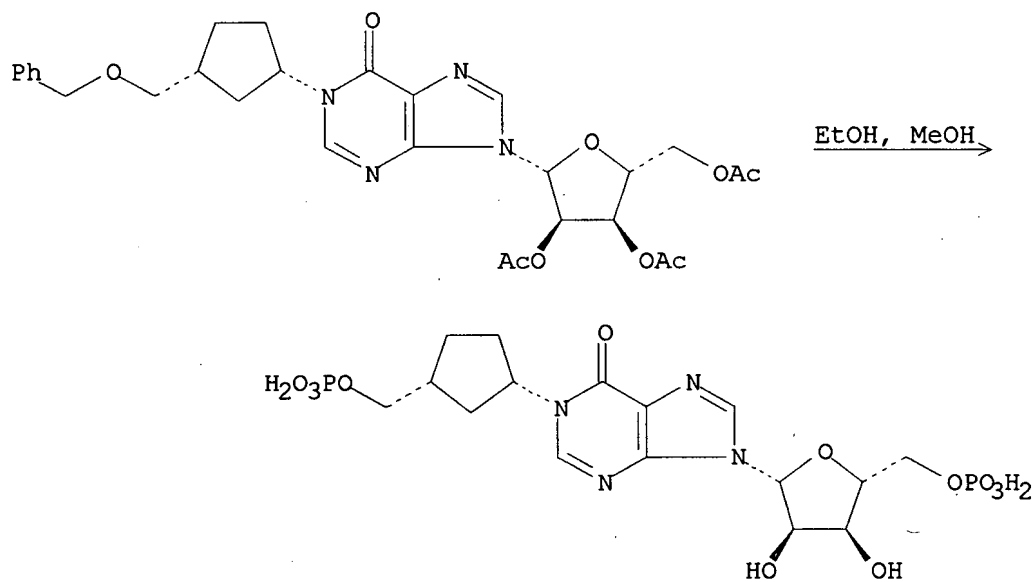


NH₃

REF: Biochemistry, 37(21), 7801-7812; 1998
NOTE: regioselective(third stage)

L8 ANSWER 107 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

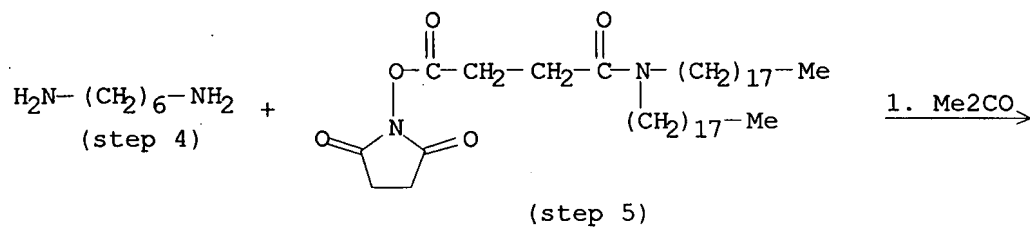
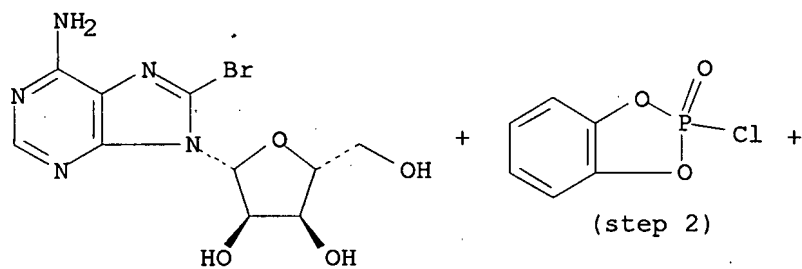
RX(2) OF 6



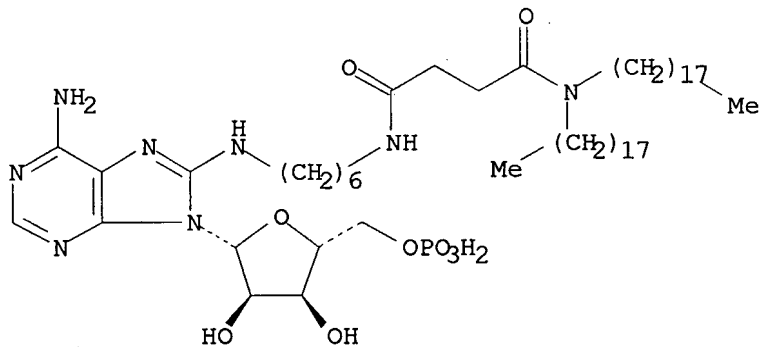
REF: Tetrahedron Letters, 38(30), 5371-5374; 1997
NOTE: MHYDROXIDE

L8 ANSWER 108 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(25) OF 28 - 6 STEPS



RX(25) OF 28 - 6 STEPS

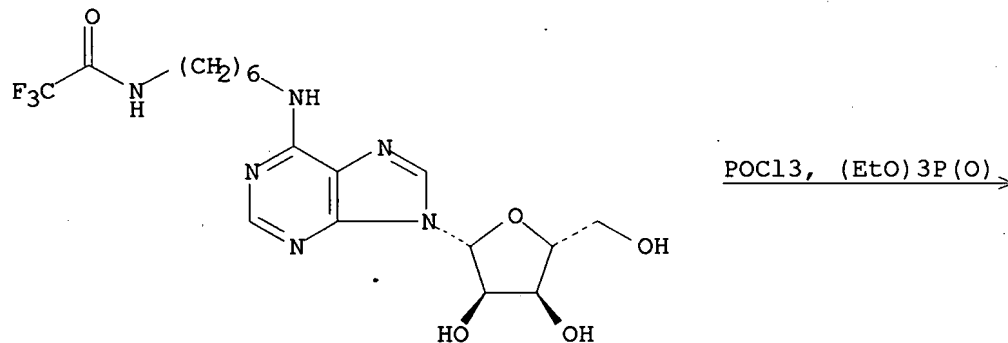


90%

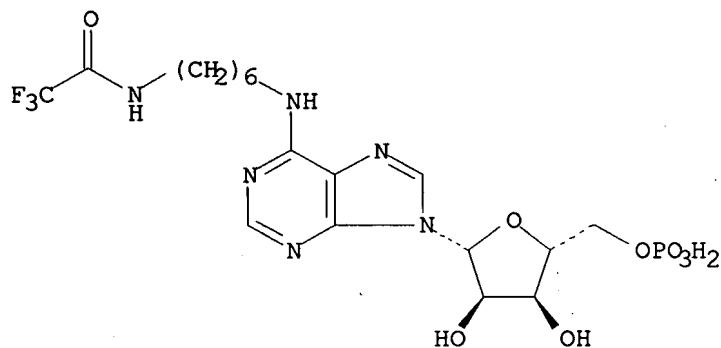
REF: Journal of the American Chemical Society, 118(24), 5532-5543; 1996

L8 ANSWER 109 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 6



RX(2) OF 6

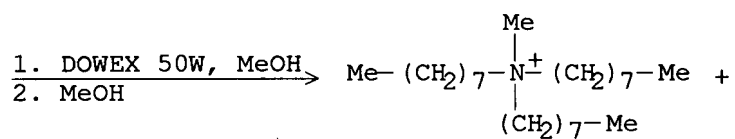
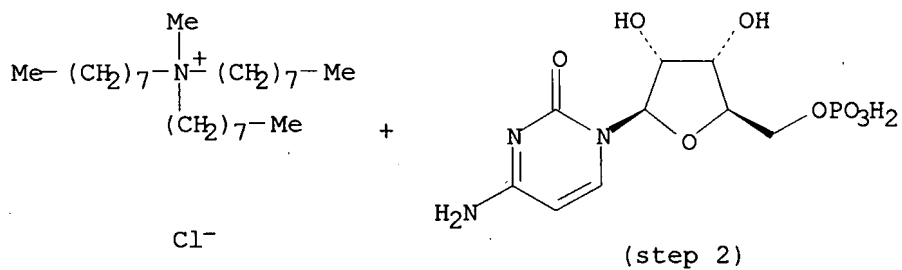


56%

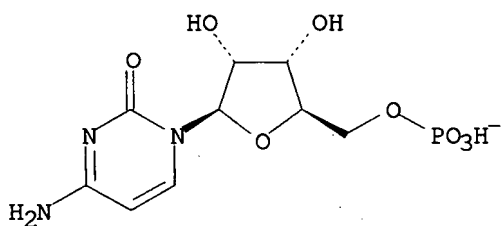
REF: Nucleosides & Nucleotides, 14(3-5), 689-92; 1995

L8 ANSWER 110 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 6

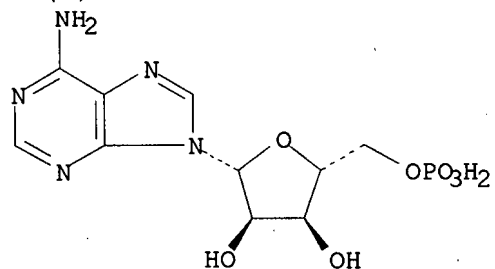


RX(1) OF 6



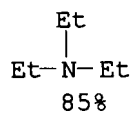
REF: Ger. Offen., 4333674, 06 Apr 1995
NOTE: Dowex in OH- form used

RX(8) OF 43

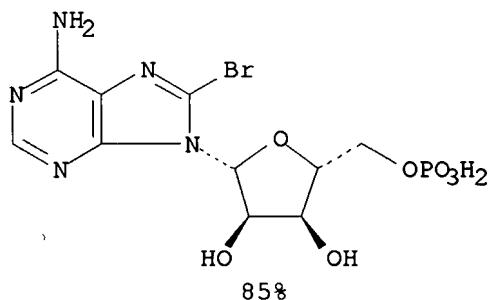


1. Br₂, AcONa, Water
2. Na₂SO₃, Water
3. Et₃N, Water, MeCN

2 Na
(step 1)



+

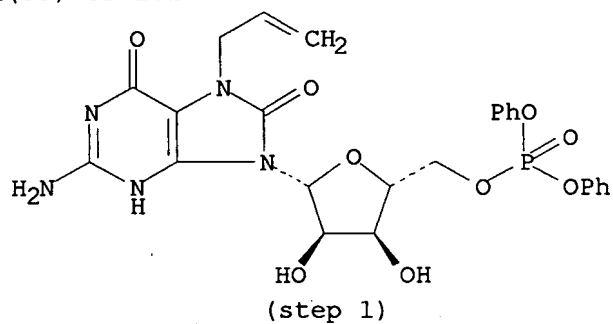


REF: Bioconjugate Chemistry, 6(4), 352-60; 1995

NOTE: Nucleosil 7C18 column used in third stage

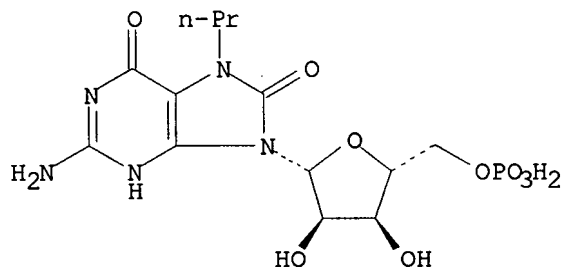
L8 ANSWER 112 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(35) OF 161



1. PtO₂, H₂, MeOH
2. LiOH, Water

RX(35) OF 161

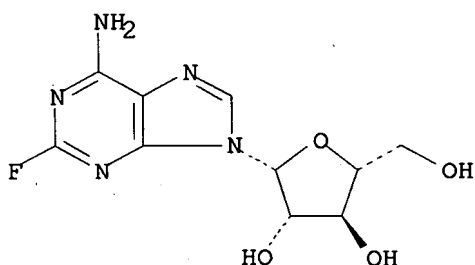


2 Li
60%

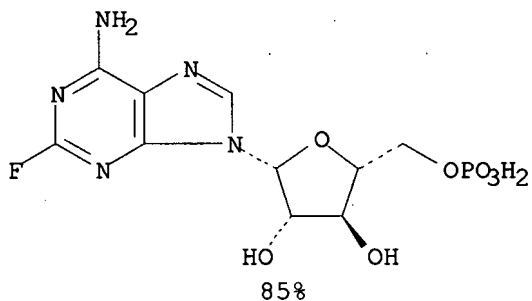
REF: Journal of Medicinal Chemistry, 37(21), 3561-78; 1994
NOTE: pH ca. 8 in stage 1

L8 ANSWER 113 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



R:4264-83-9, ZnSO4,
Water

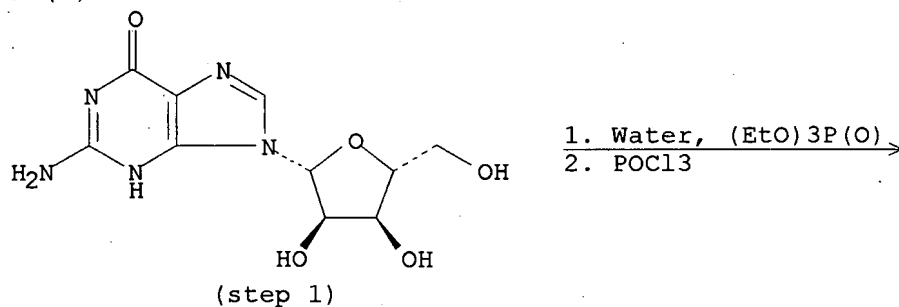


REF: PCT Int. Appl., 9509244, 06 Apr 1995

NOTE: buffered soln. acetate pH 4.5, biotransformation, enzymic,
Pseudomonas trifolii IAM 1309 used, alternative reaction
conditions gave lower yield

L8 ANSWER 114 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

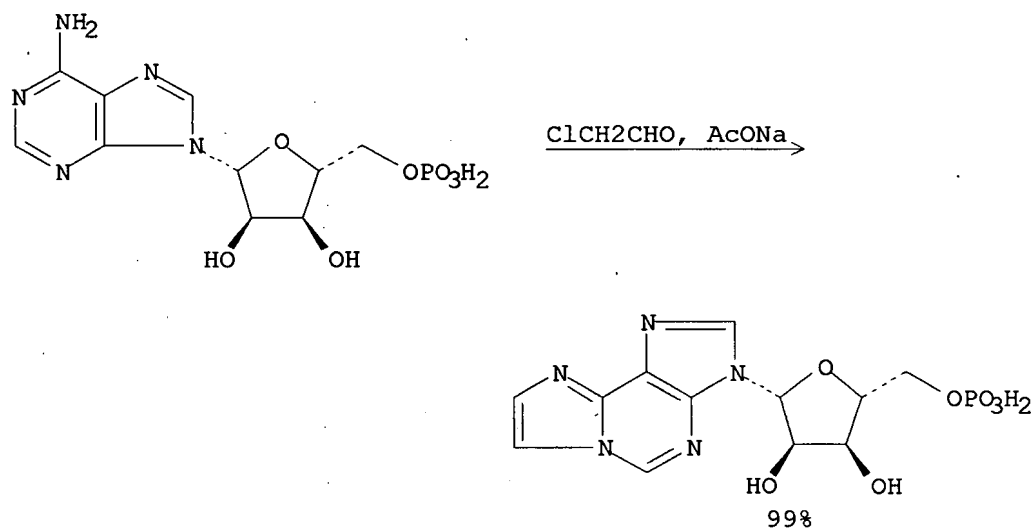
RX(1) OF 8



REF: Chemical & Pharmaceutical Bulletin, 43(2), 210-15; 1995

L8 ANSWER 115 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

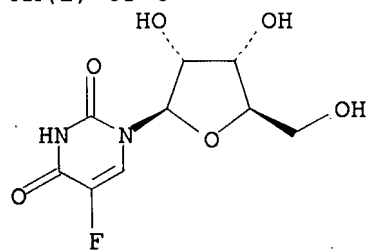
RX(1) OF 70



REF: Nucleosides & Nucleotides, 14(1 & 2), 65-76; 1995

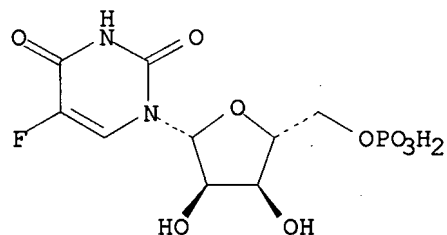
L8 ANSWER 116 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3



(step 1)

1. PhCOCl , $(\text{MeO})_3\text{PO}$
2. Water
3. LiOH , Water
4. HCl , Water
5. Ba acetate

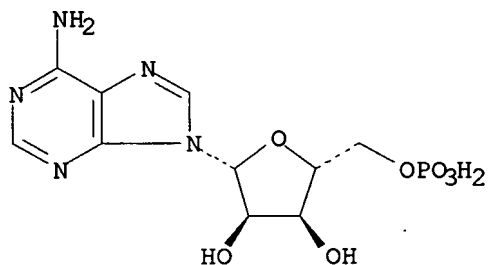


Ba
53%

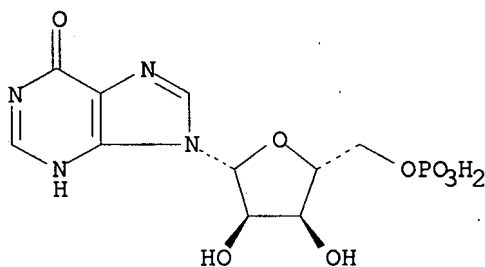
REF: Carbohydrate Research, 265(2), 299-302; 1994

L8 ANSWER 117 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 14



$\xrightarrow{\text{C:9025-10-9, Water}}$



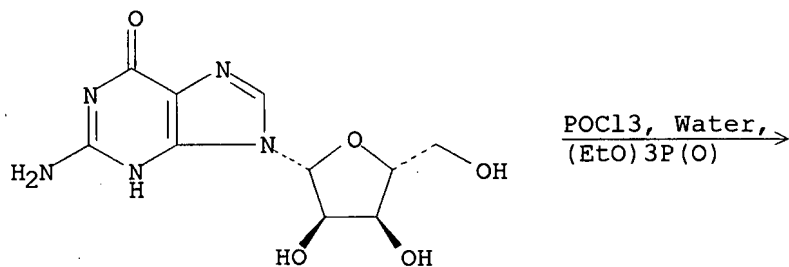
100%

REF: Journal of Organic Chemistry, 59(24), 7214-18; 1994

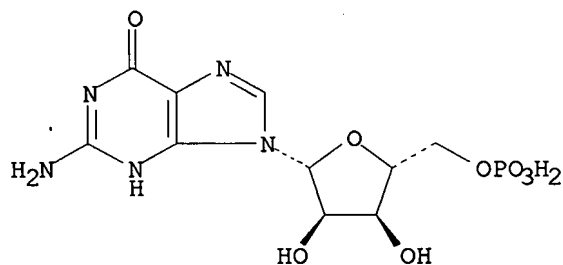
NOTE: BIOTRANSFORMATION, ENZYMIC (AMPDA FROM ASPERGILLUS SP.);
PHOSPHATE BUFFER

L8 ANSWER 118 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



RX(1) OF 2



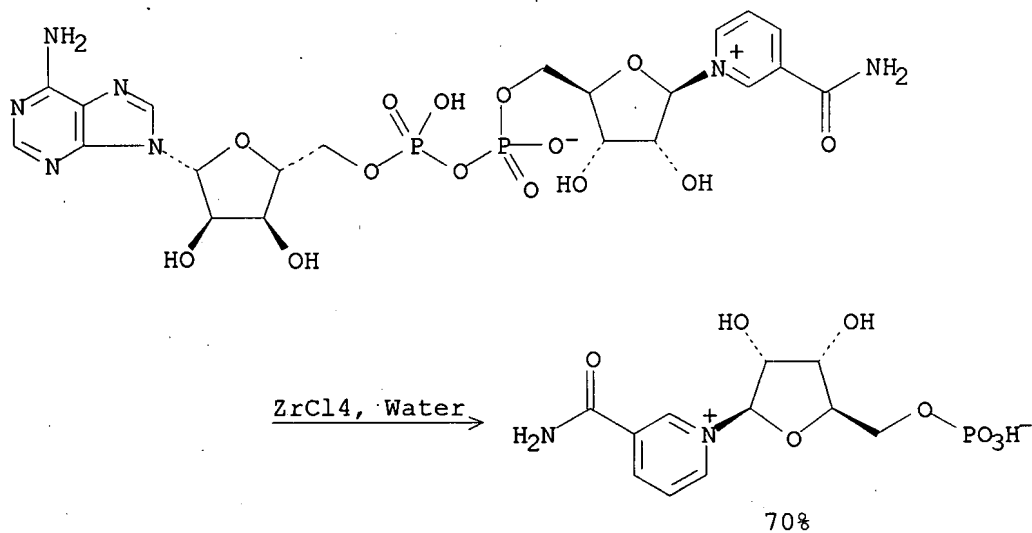
2 Na
90%

REF: Can. Pat. Appl., 2100027, 09 Jan 1994

NOTE: heating suspension of nucleoside crystals at 50.degree. prior to
phosphorylation; 5.degree. for phosphorylation

L8 ANSWER 119 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

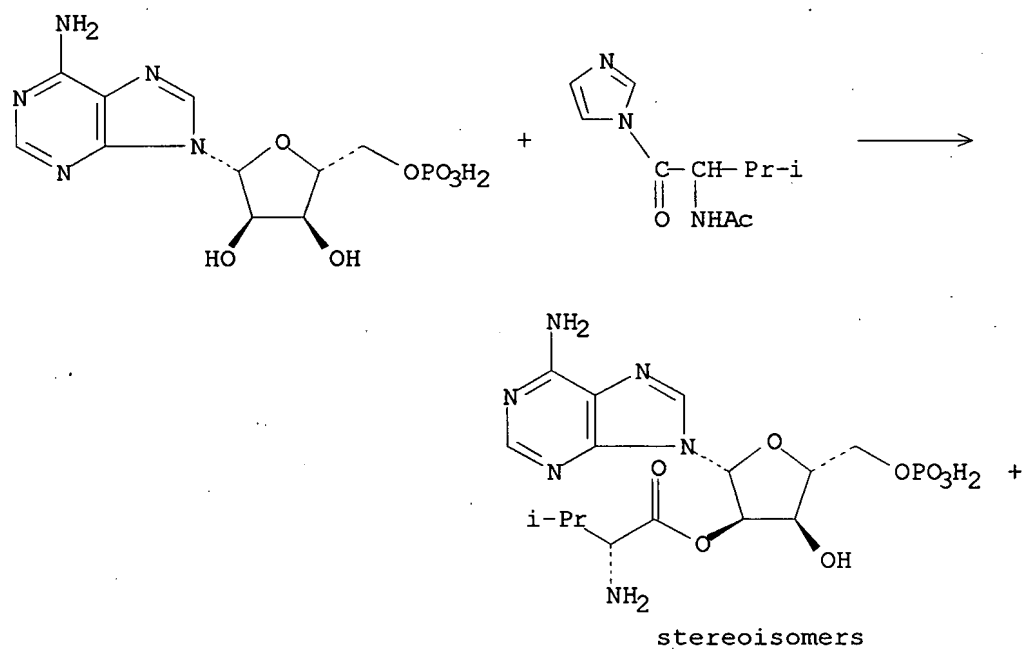
RX(1) OF 1



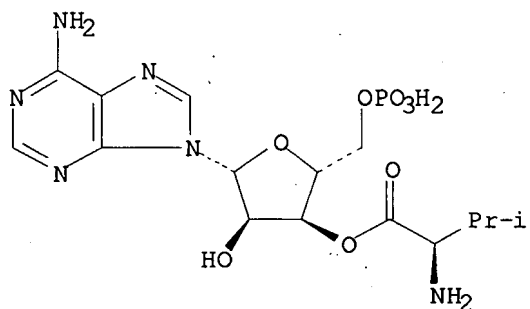
REF: Nucleosides & Nucleotides, 13(5), 1215-16; 1994

L8 ANSWER 120 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



RX(1) OF 1



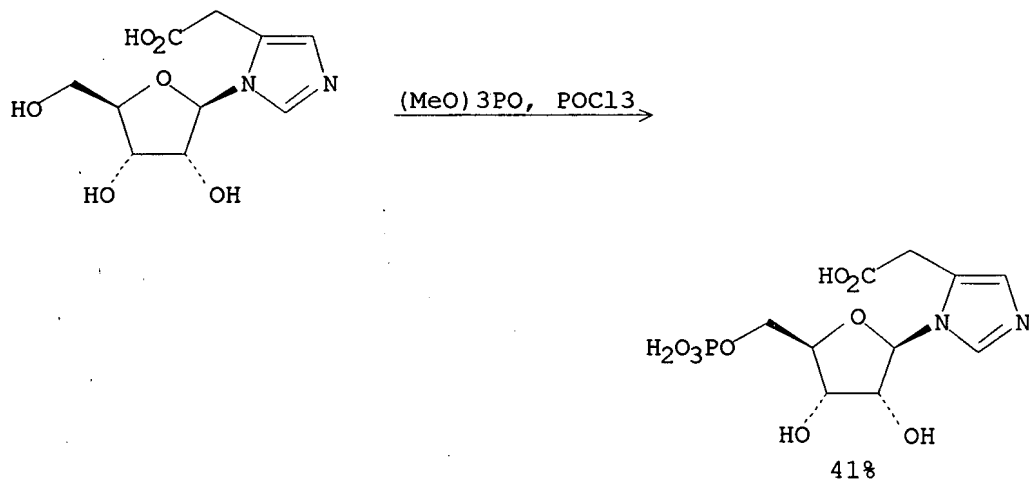
stereoisomers

REF: Bioorganic Chemistry, 20(3), 265-8; 1992

NOTE: stereoselective

L8 ANSWER 121 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

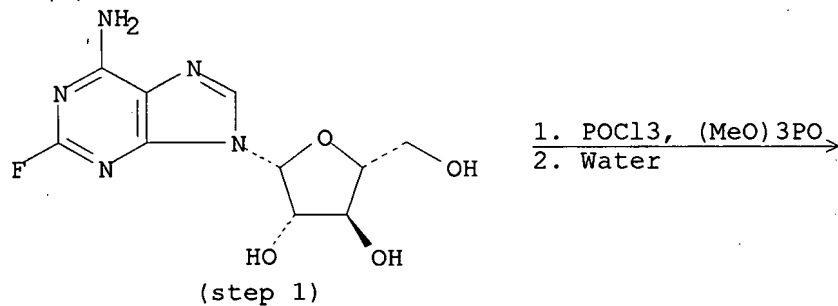
RX(4) OF 15



REF: Korean Journal of Medicinal Chemistry, 1(1), 54-64; 1991

L8 ANSWER 122 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

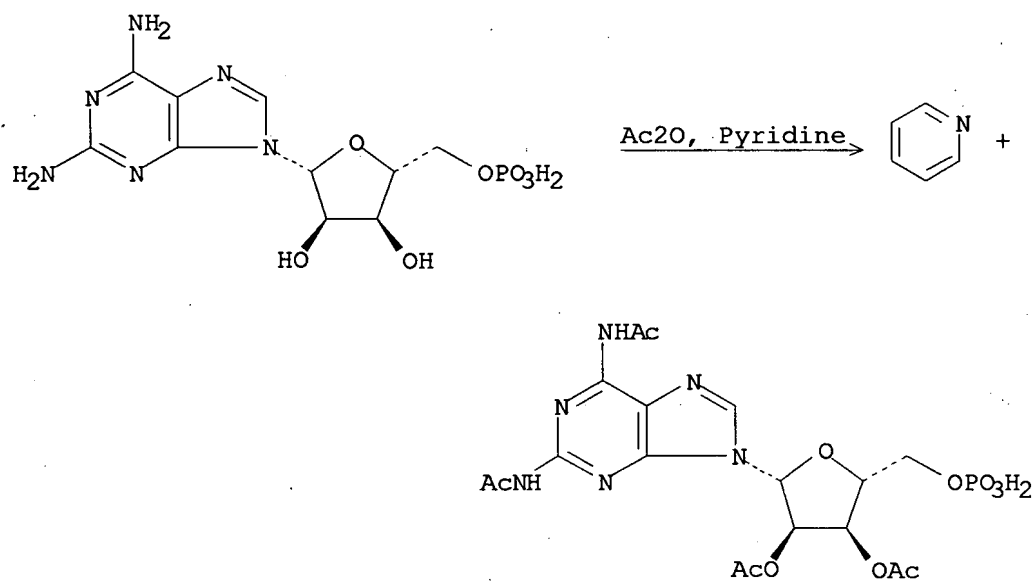
RX(1) OF 1



REF: PCT Int. Appl., 9200312, 09 Jan 1992

L8 ANSWER 123 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

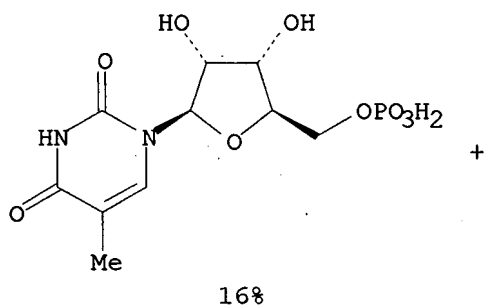
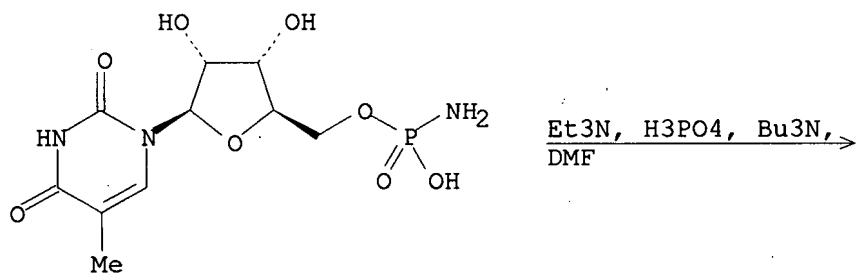
RX(1) OF 1



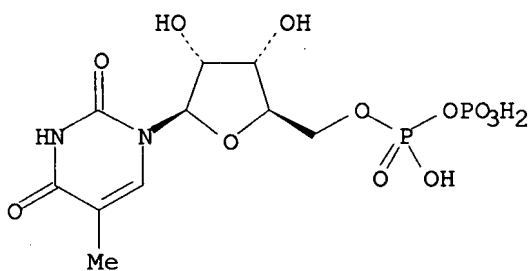
REF: Nucleosides & Nucleotides, 10(6), 1317-32; 1991

L8 ANSWER 124 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3



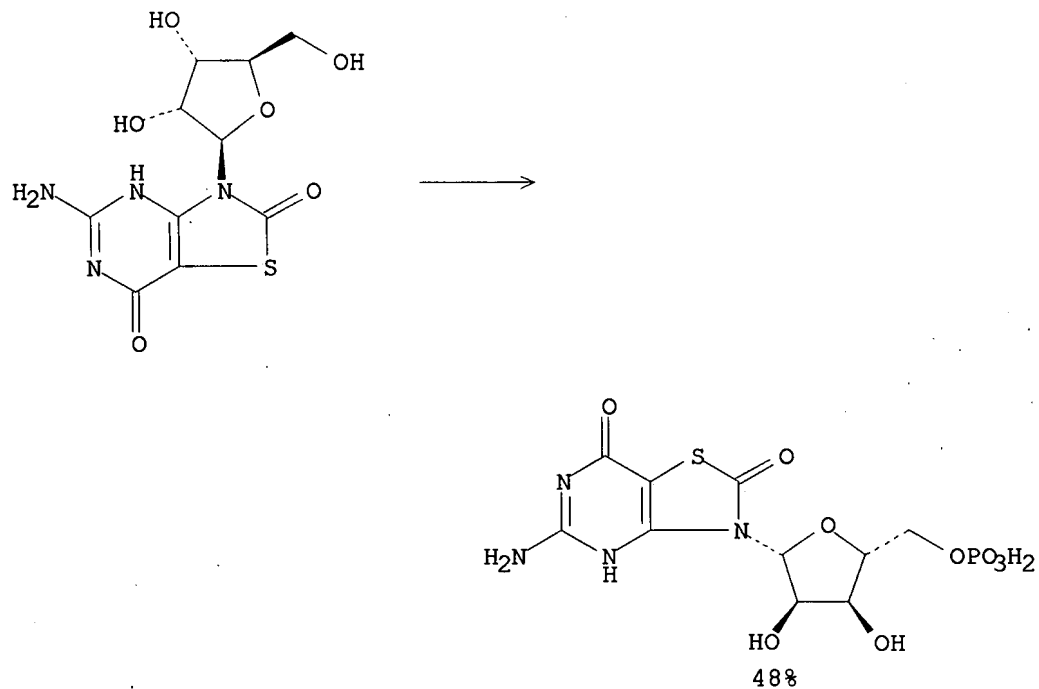
RX(1) OF 3



3 Na
68%

REF: Nucleic Acid Chem., 320-4; 1991

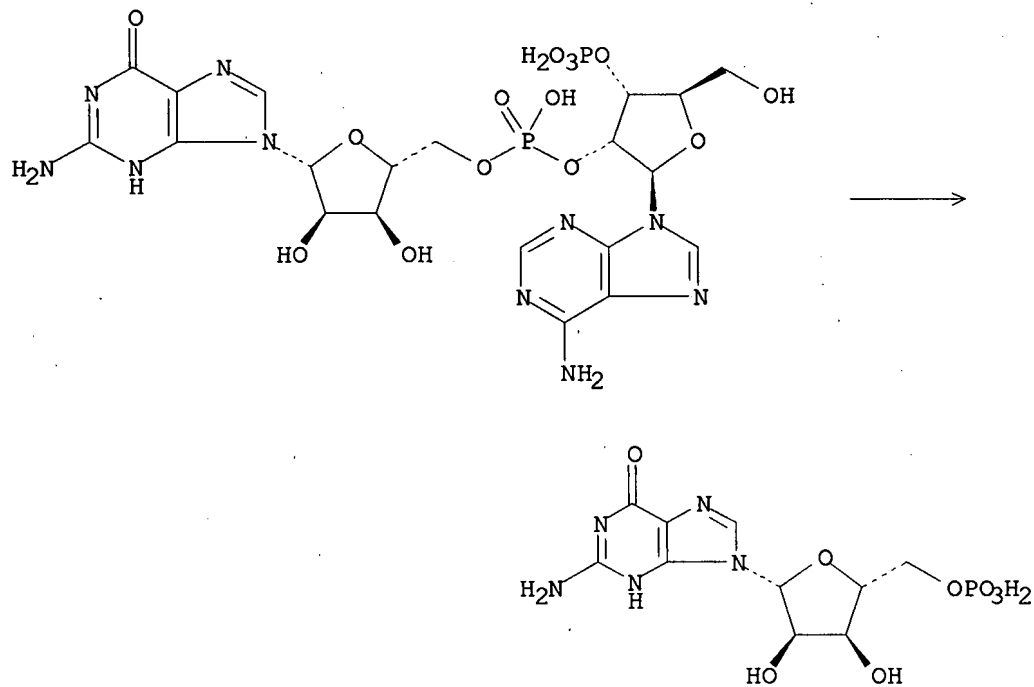
RX(5) OF 11



REF: Journal of Medicinal Chemistry, 34(10), 3006-10; 1991

L8 ANSWER 126 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

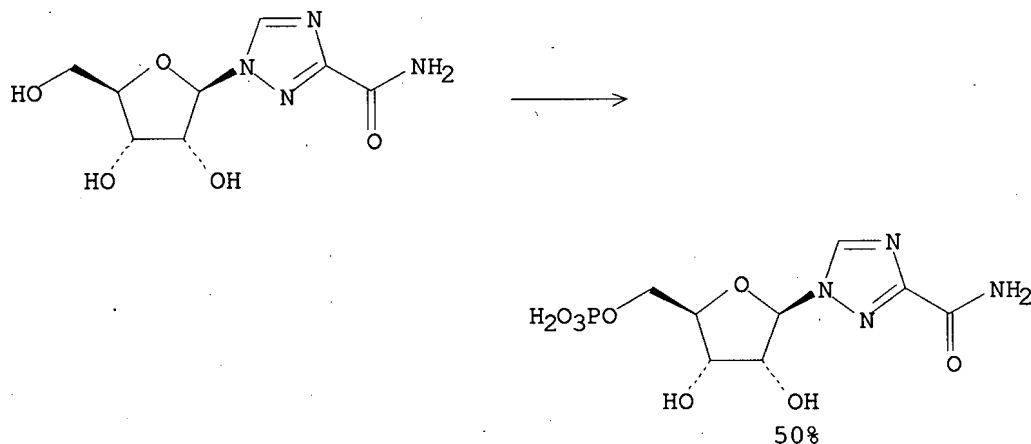
RX(2) OF 27



REF: Bulletin of the Chemical Society of Japan, 64(2), 588-601; 1991

L8 ANSWER 127 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

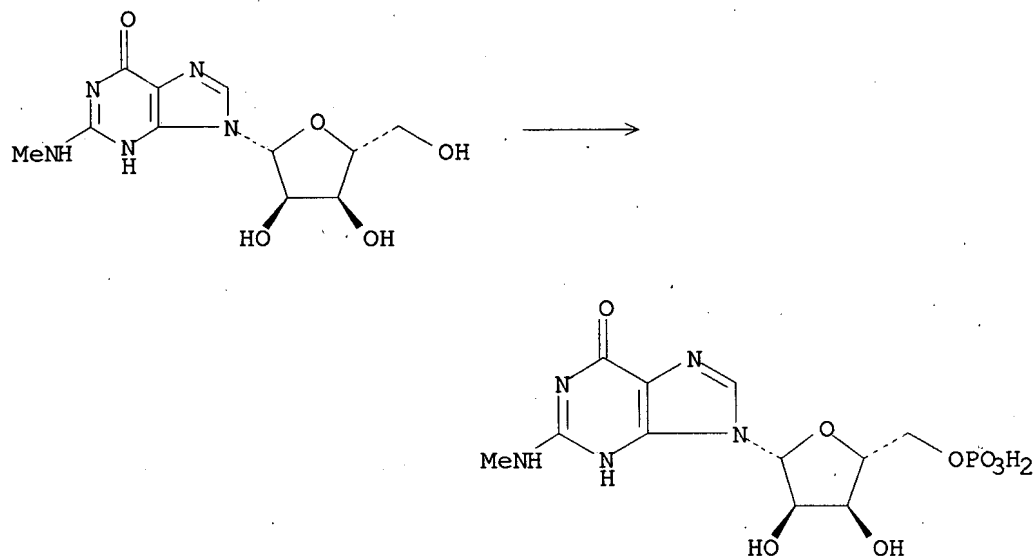
RX(2) OF 3



REF: Vestsi Akademii Navuk BSSR, Seryya Khimichnykh Navuk, (5), 90-4; 1990

L8 ANSWER 128 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

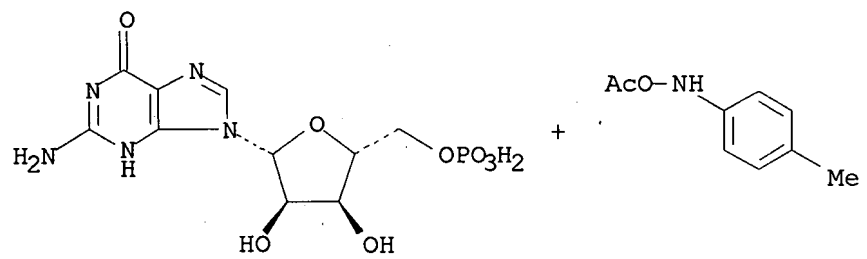
RX(7) OF 21



REF: Nucleosides & Nucleotides, 9(4), 599-618; 1990

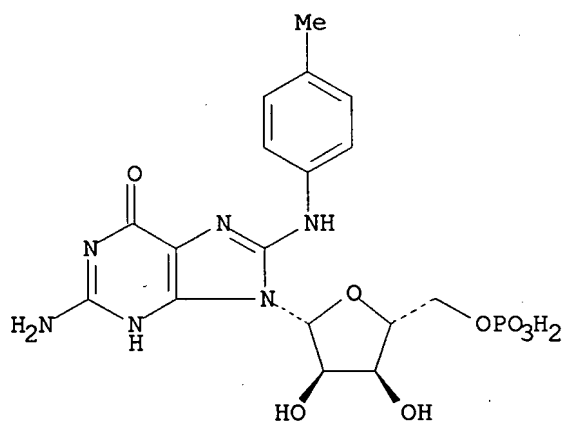
L8 ANSWER 129 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(19) OF 26



Et₃N, THF, Water →

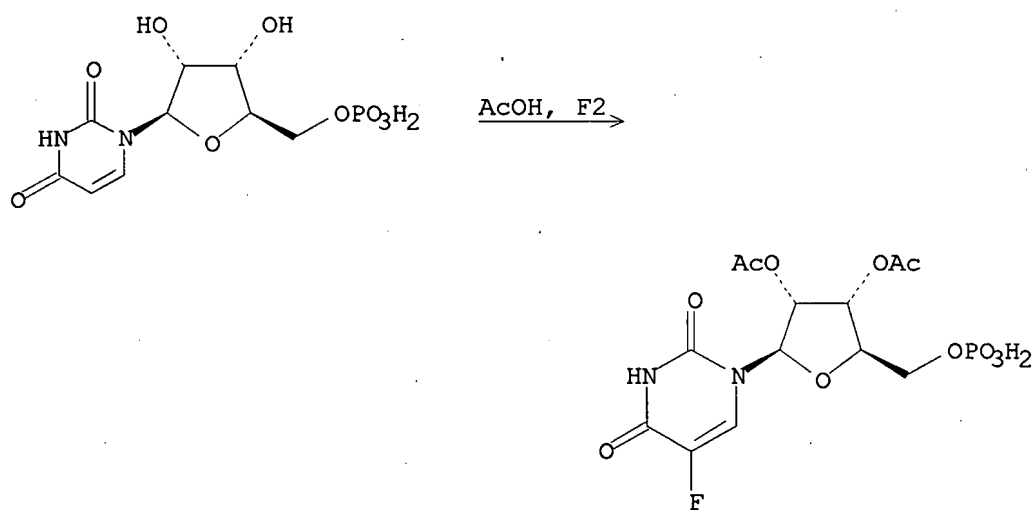
RX(19) OF 26



REF: Chemische Berichte, 123(8), 1699-705; 1990

L8 ANSWER 130 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 25

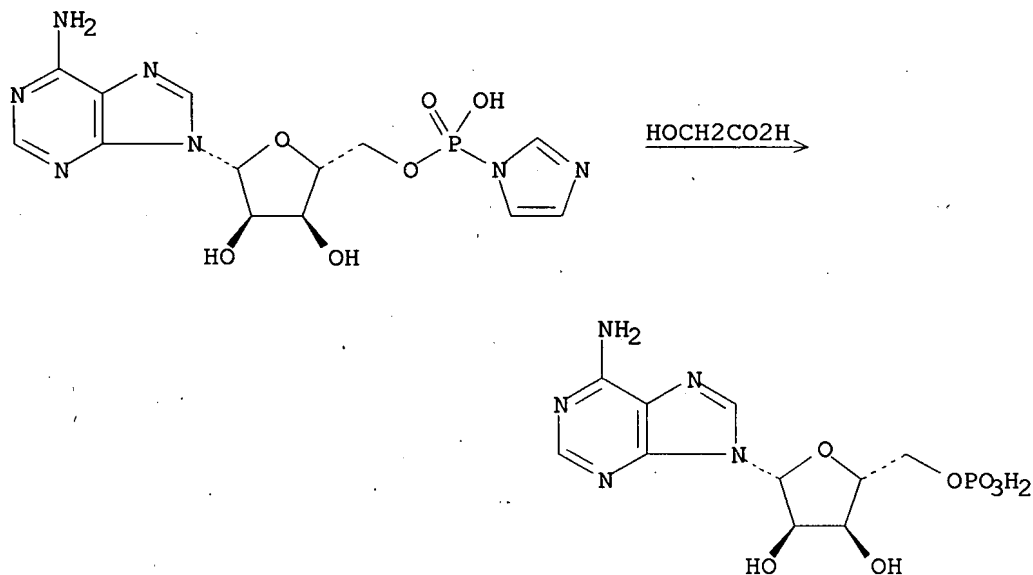


938

REF: Journal fuer Praktische Chemie (Leipzig), 331(5), 835-42; 1989

L8 ANSWER 131 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

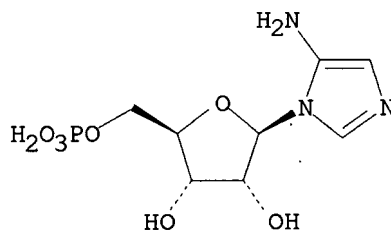
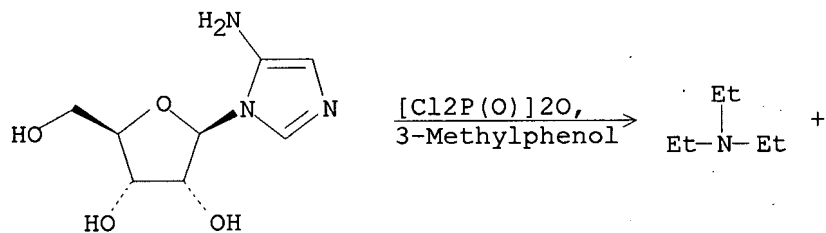
RX(1) OF 3.



REF: Bulletin of the Chemical Society of Japan, 63(3), 692-6; 1990

L8 ANSWER 132 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

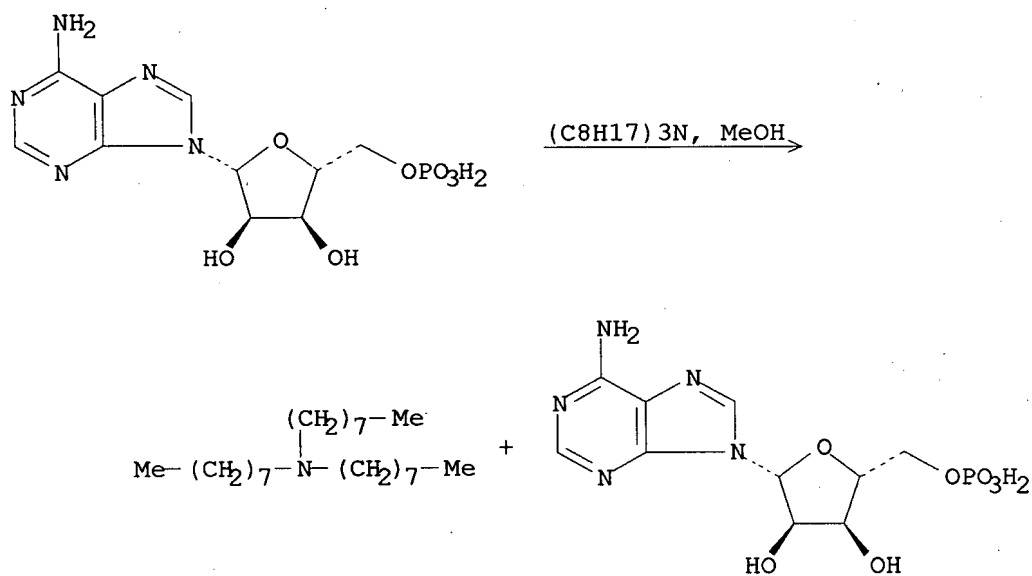
RX(21) OF 105



REF: Journal of the American Chemical Society, 112(12), 4891-7; 1990
 NOTE: 2nd step SEPHADEX A-25 column

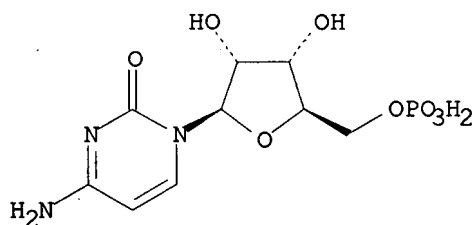
L8 ANSWER 133 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(4) OF 102



REF: Bulletin de la Societe Chimique de France, (July-Aug.), 521-31; 1989

L8 ANSWER 134 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

Nc1nc(=O)n([C@H]2O[C@H](COPO3)[C@@H](O)[C@H]2O)c1=O
$$\begin{array}{c} \text{n-Bu} \\ | \\ \text{n-Bu-N-Bu-n} \end{array}$$


L8 ANSWER 135 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

Nc1nc2c(cnc2c1)N[C@@H]3O[C@H](CO)[C@@H](O)[C@H]3O.Cl

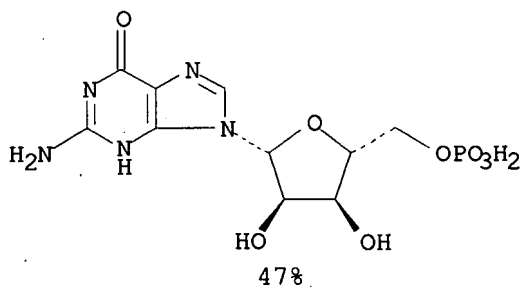
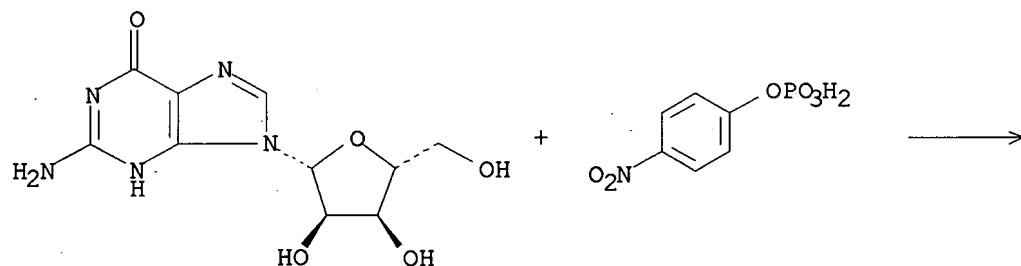
(step 1)

Nc1nc2c(c1)cnc2N[C@@H]3O[C@H](COP(=O)(O)O)[C@@H](O)[C@H]3O

REF: Nucleosides & Nucleotides, 8(7), 1201-16; 1989

L8 ANSWER 136 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

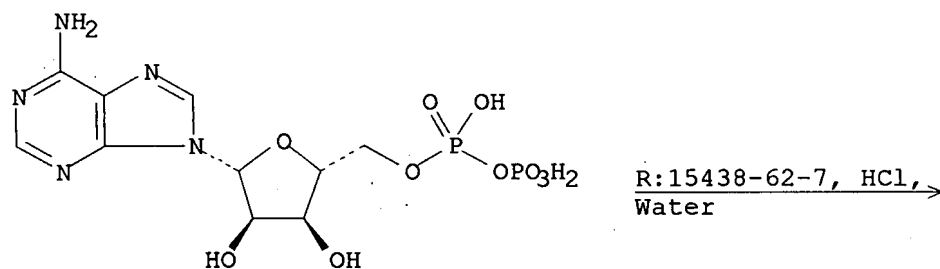
RX(5) OF 20



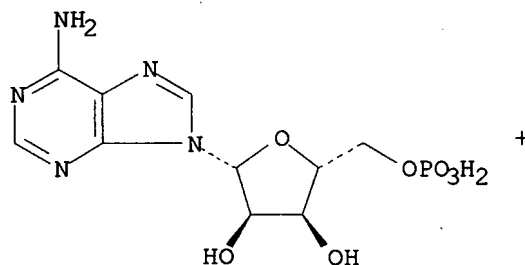
REF: Khimiya Prirodnkh Soedinenii, (5), 732-3; 1989

L8 ANSWER 137 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

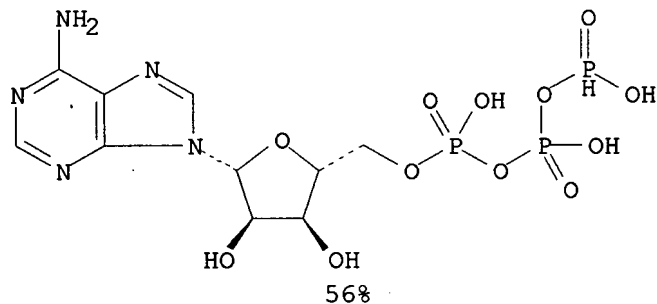
RX(1) OF 3



2 Na



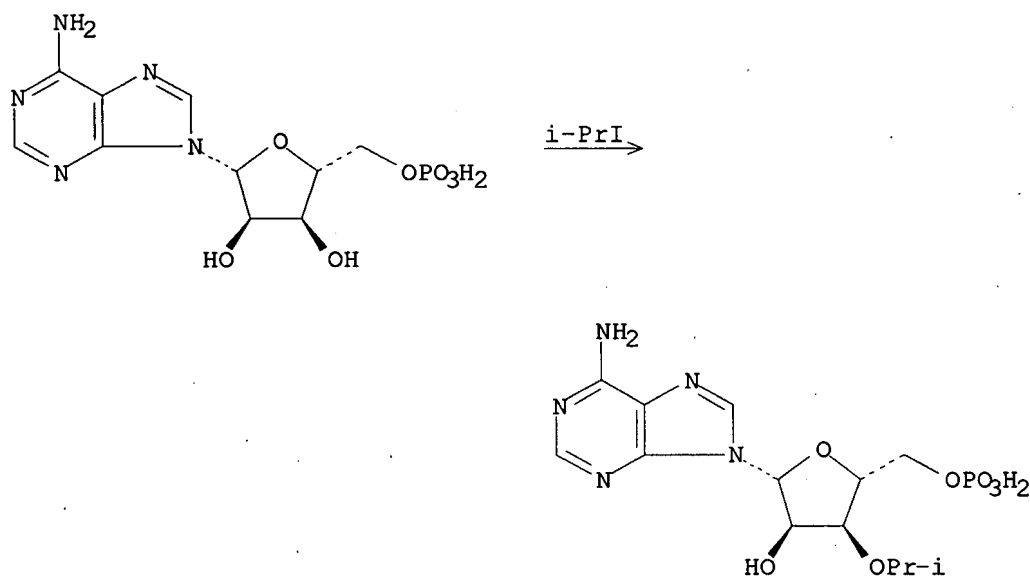
RX(1) OF 3



REF: Bulletin of the Chemical Society of Japan, 62(5), 1587-92; 1989
NOTE: pH 5

L8 ANSWER 138 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

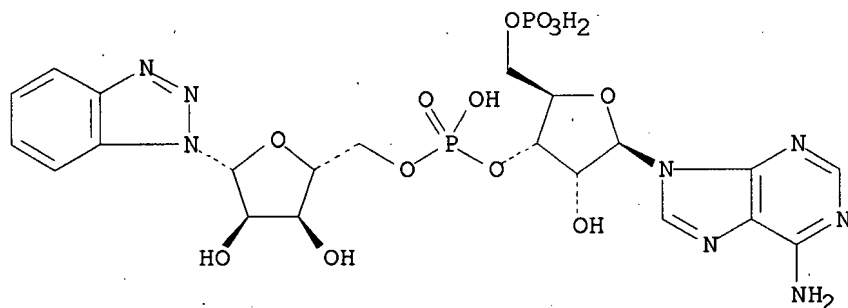
RX(2) OF 5



REF: Pakistan Journal of Scientific and Industrial Research, 31(11),
745-8; 1988

L8 ANSWER 139 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

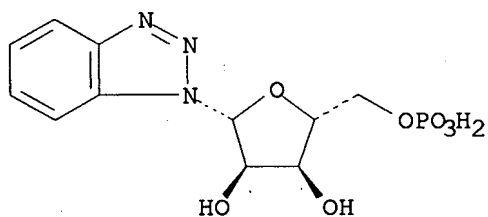
RX(8) OF 22



2 NH₃

Phosphodiesterase →

RX(8) OF 22



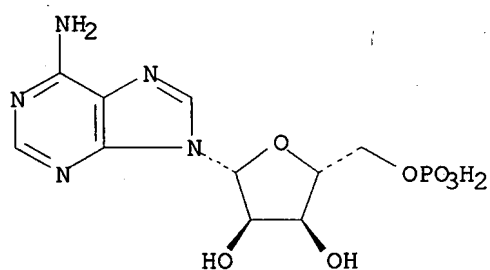
NH₃

96%

REF: Journal of Heterocyclic Chemistry, 26(2), 339-43; 1989
NOTE: Buffered soln.

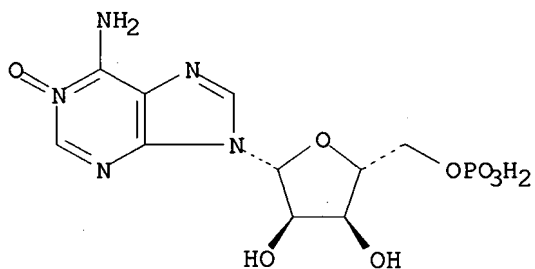
L8 ANSWER 140 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



K H persulfate, NaOH,
Water →

RX(1) OF 1

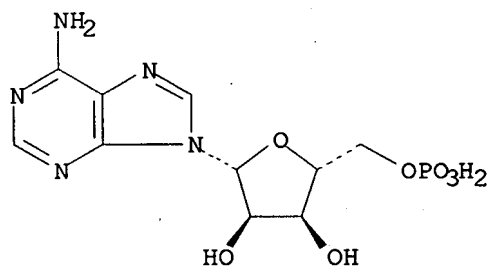


2 NH₃
53%

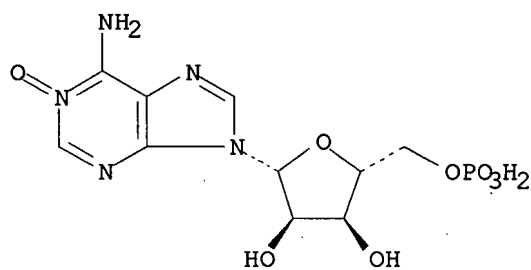
REF: Journal of Organic Chemistry, 54(13), 3213-15; 1989

L8 ANSWER 141 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 6



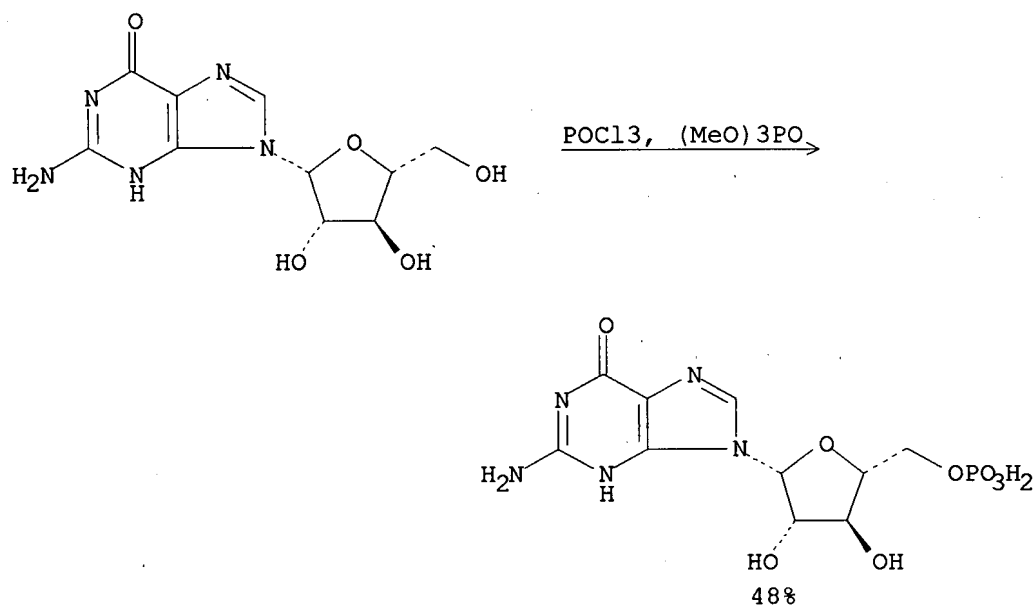
K H persulfate, Water →



REF: Tetrahedron Letters, 29(50), 6615-18; 1988

L8 ANSWER 142 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

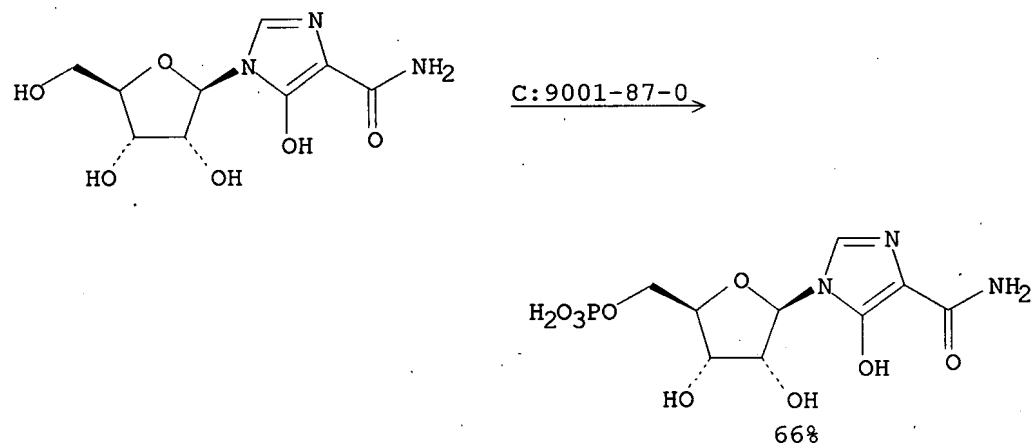
RX(11) OF 23



REF: Journal of Heterocyclic Chemistry, 25(6), 1899-903; 1988

L8 ANSWER 143 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(4) OF 4

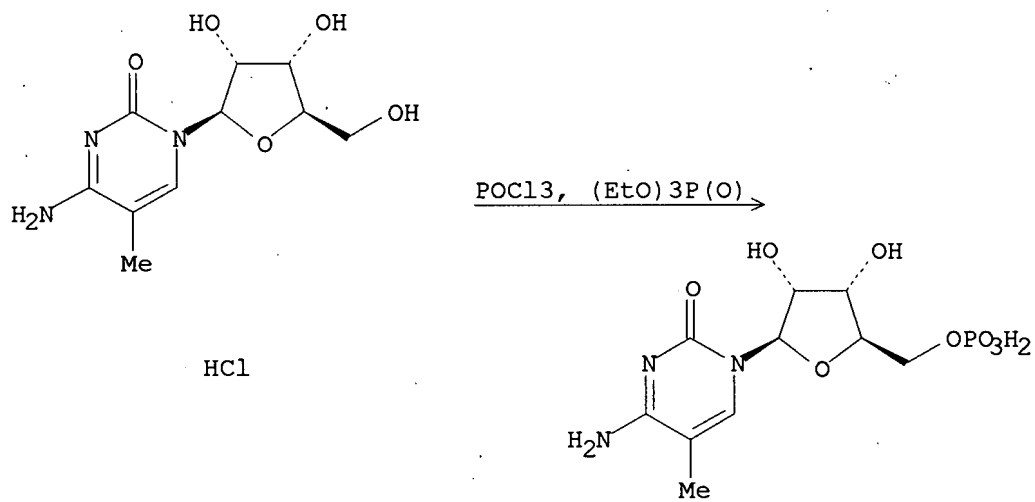


REF: Chemical & Pharmaceutical Bulletin, 36(12), 5020-3; 1988

NOTE: Biotransformation: catalyzed by phospholipase d from streptomyces sp. aa 586; # Conditions: 0,5 mmol educt + 1,5 mmol alkylphosphorylcholine in 40 ml chcl3; 15 mg (2780 u) cellfree enzyme; 200 mmol acetate-buffer containing 250 mmol cac12 (ph 5,8); 6 h, 45.deg.c

L8 ANSWER 144 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 24



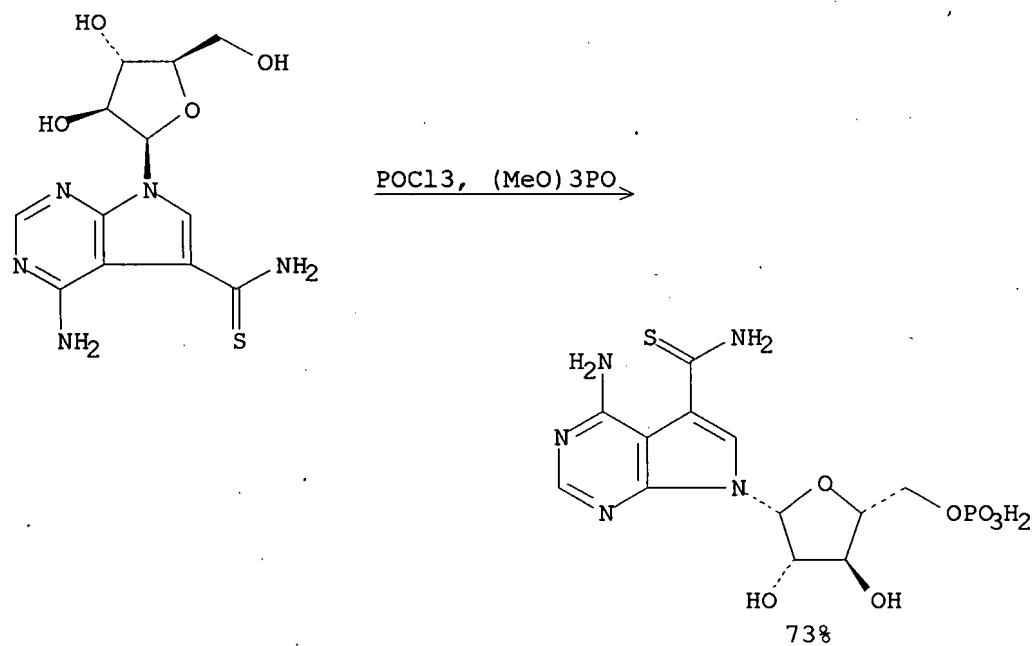
2 NH_3

75%

REF: Journal of Medicinal Chemistry, 32(1), 224-8; 1989

L8 ANSWER 145 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

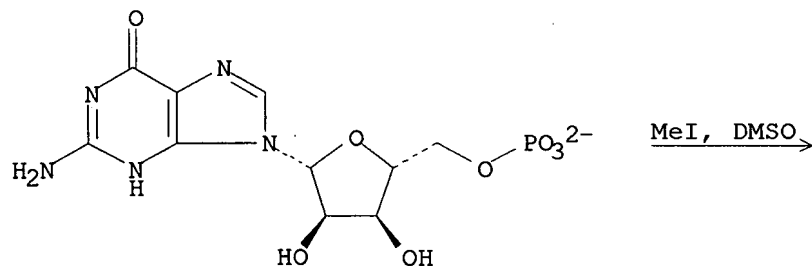
RX(3) OF 25



REF: Journal of Heterocyclic Chemistry, 25(3), 1043-6; 1988

L8 ANSWER 146 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 6



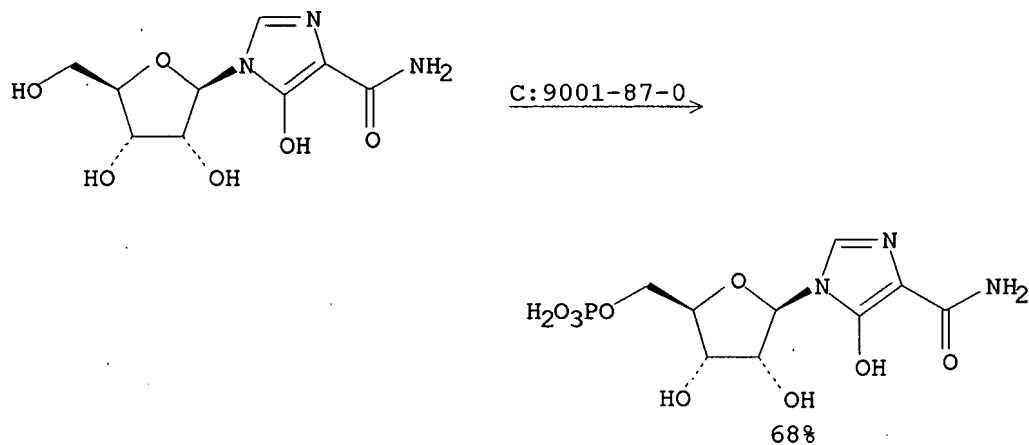
REF: Acta Chemica Scandinavica, Series B: Organic Chemistry and Biochemistry, B42(2), 86-92; 1988

L8 ANSWER 147 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(35) OF 43 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 148 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

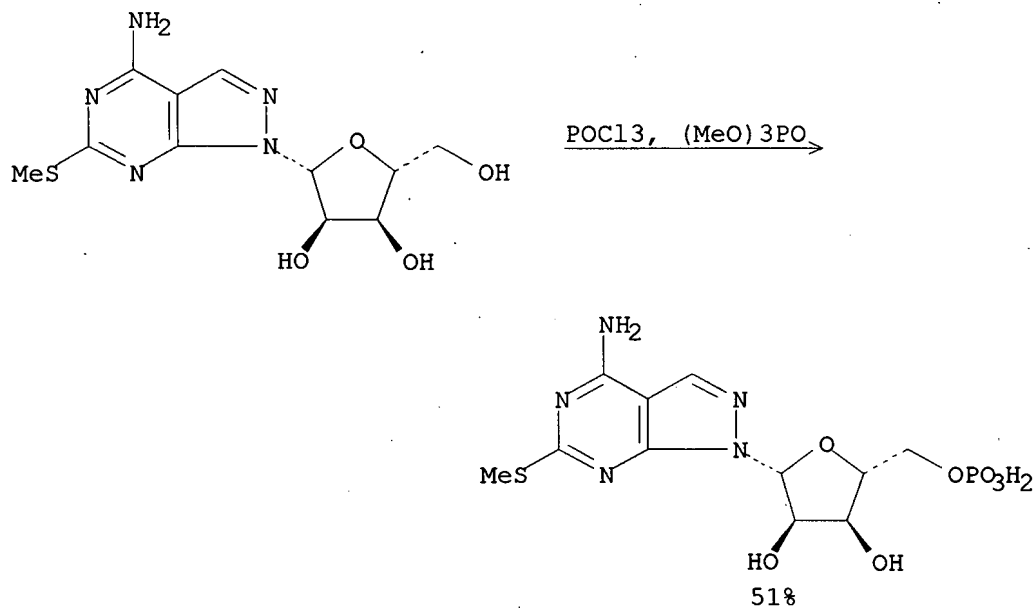
RX(9) OF 9



REF: Chemical & Pharmaceutical Bulletin, 36(1), 209-17; 1988
NOTE: Biotransformation: catalyzed by phospholipase d-p from streptomyces sp. aa 586; # Conditions: 367 mg (0,05 mmol) educt in 20 ml chcl3 + 20 equival.3-syn.-phosphatidylcholine; 3 mg(550 u) cellfree enzyme; 250 mm cac12, 200 mm acetate buffer (ph 5,6); 6 h, 45.deg.c

L8 ANSWER 149 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

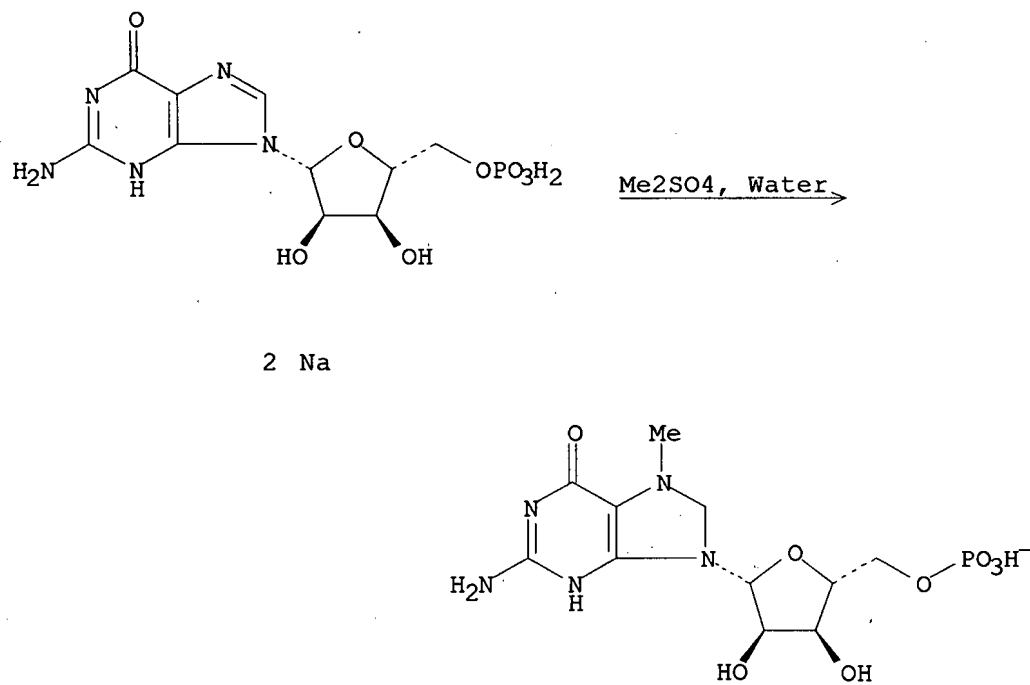
RX(1) OF 30



REF: Nucleosides & Nucleotides, 6(5), 853-63; 1987

L8 ANSWER 150 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

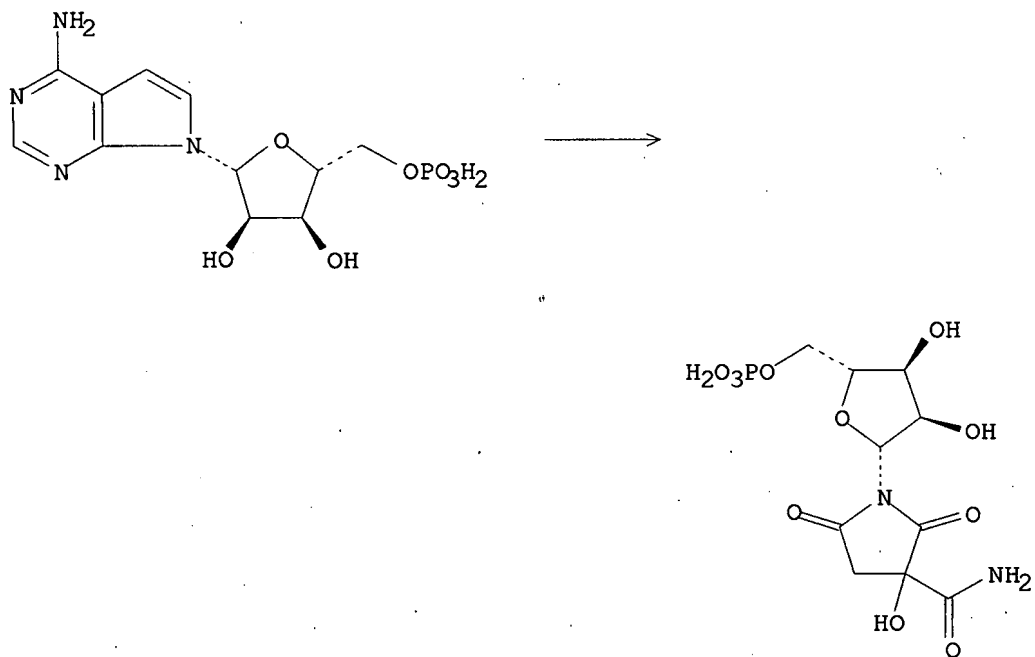
RX(3) OF 3



REF: Journal of the Chemical Society, Perkin Transactions 2:
Physical Organic Chemistry (1972-1999), (12), 1739-45; 1987
NOTE: pH 5

L8 ANSWER 151 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

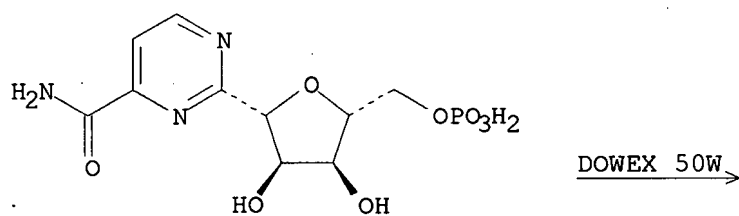
RX(2) OF 3



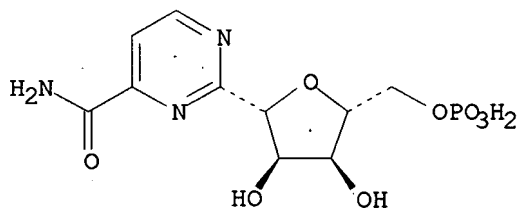
REF: Analytica Chimica Acta, 202,, 167-74; 1987

L8 ANSWER 152 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(16) OF 97



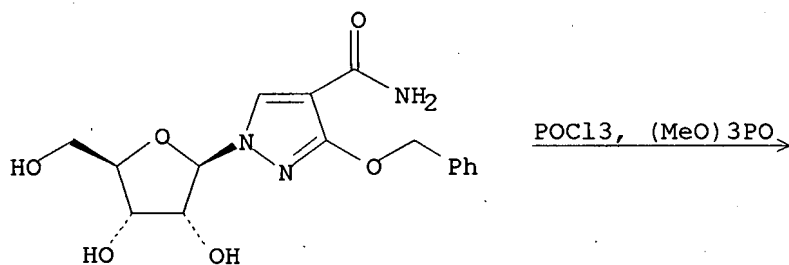
2 NH₃



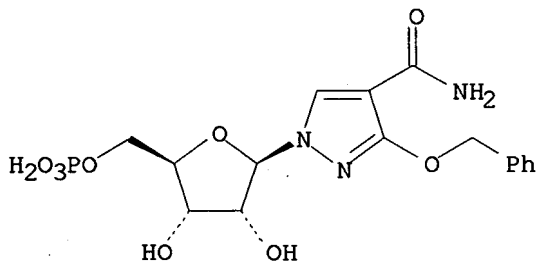
REF: Journal of Heterocyclic Chemistry, 24(4), 955-64; 1987

L8 ANSWER 153 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(12) OF 122



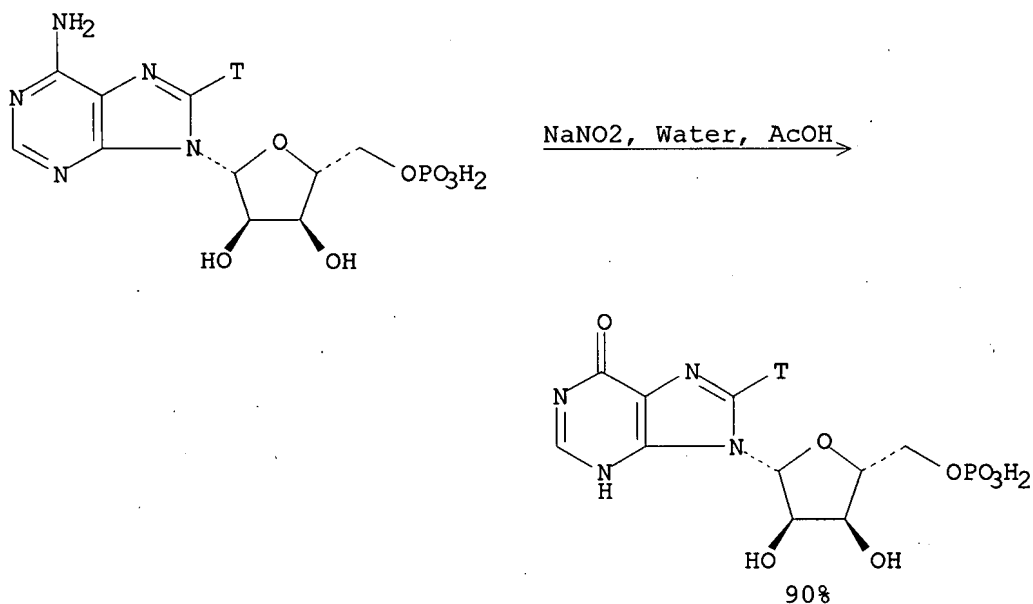
RX(12) OF 122



2 Na
74%

REF: Nucleosides & Nucleotides, 6(4), 737-59; 1987

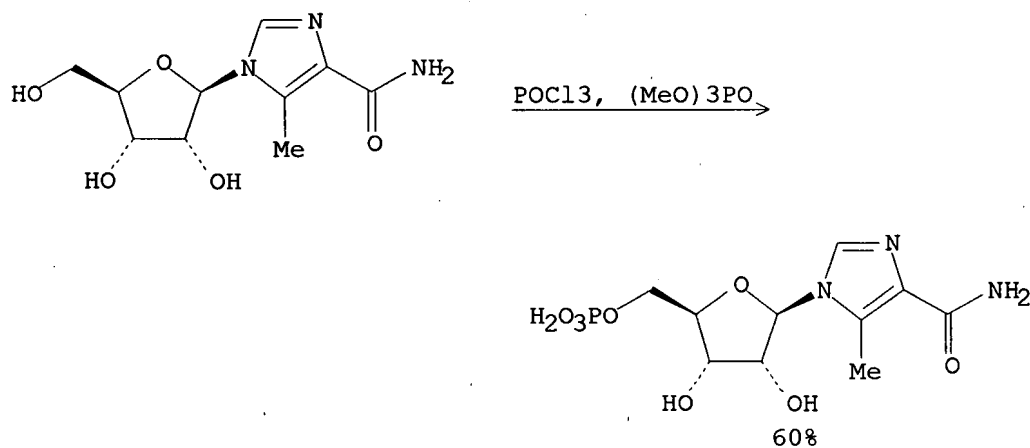
RX(4) OF 6



REF: Khimiya Prirodnkh Soedinenii, (1), 128-31; 1987

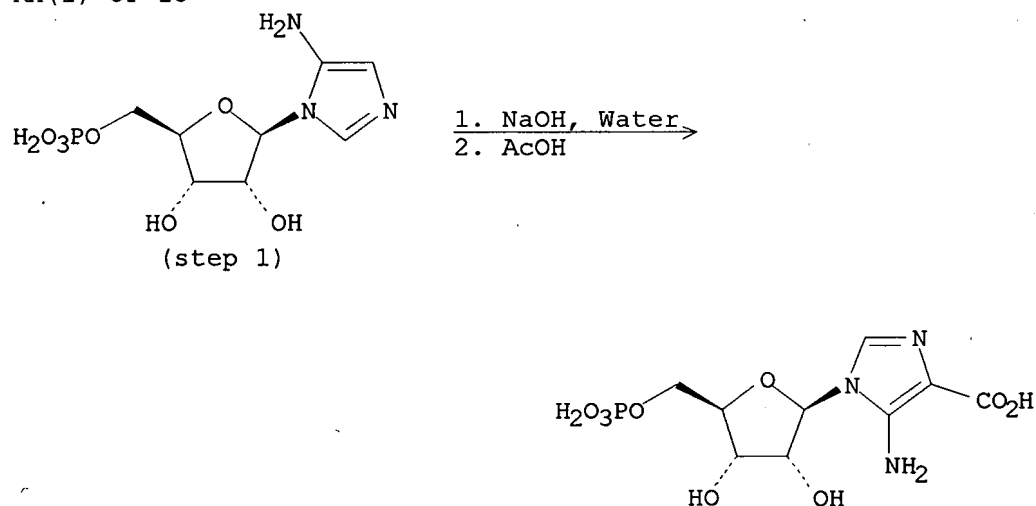
RX(2) OF 4 - REACTION DIAGRAM NOT AVAILABLE

RX(1) OF 16



REF: Anales de Quimica, Serie C: Quimica Organica y Bioquimica, 82(3), 238-40; 1986

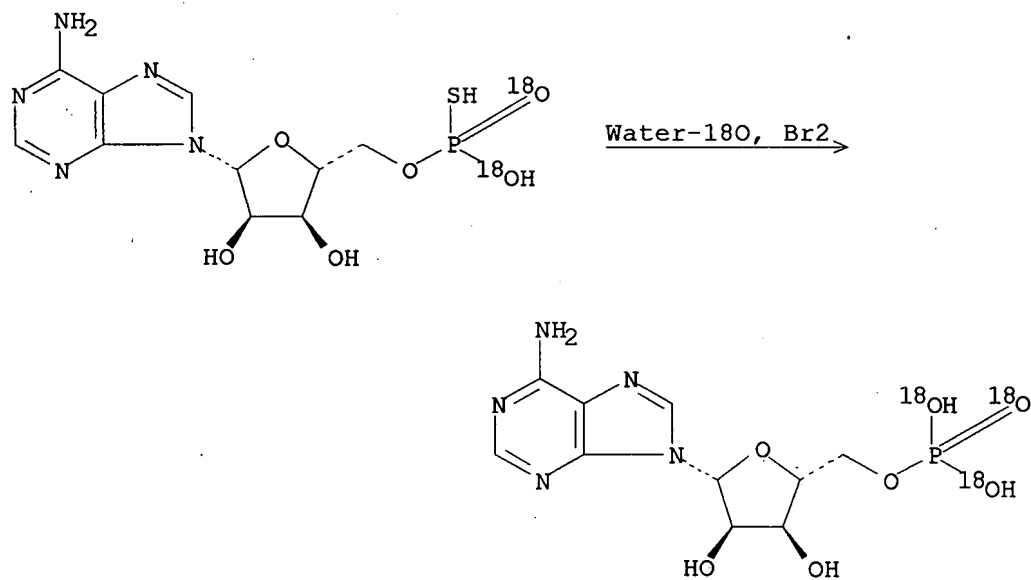
RX(1) OF 15



REF: Zhurnal Obshchei Khimii, 57(3), 692-701; 1987

L8 ANSWER 158 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(5) OF 7



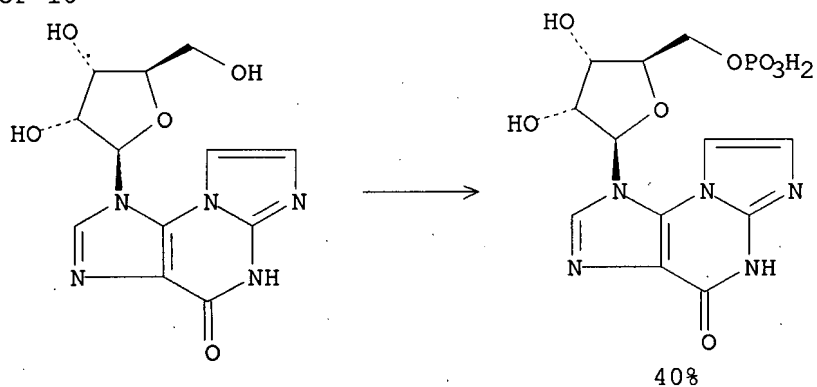
REF: Journal of Labelled Compounds and Radiopharmaceuticals, 24(3), 239-46; 1987

L8 ANSWER 159 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(12) OF 112 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 160 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 18

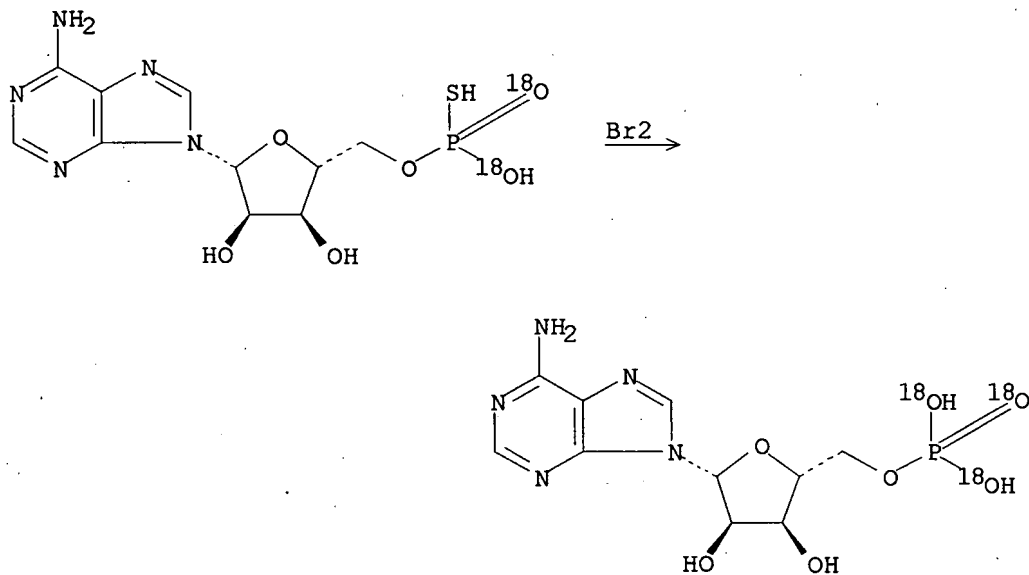


REF: Journal of Organic Chemistry, 52(12), 2374-8; 1987

NOTE: Enzymic phosphorylation

L8 ANSWER 161 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

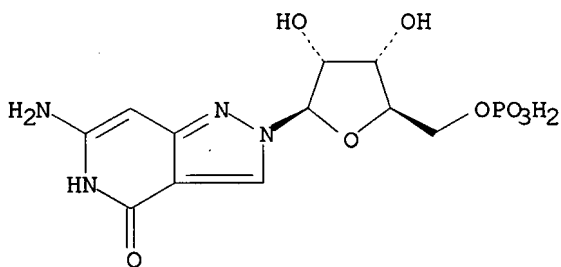
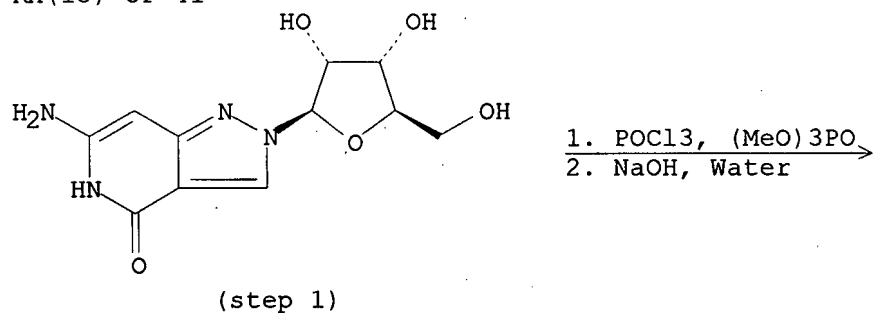
RX(4) OF 48



REF: Journal of the Chemical Society, Chemical Communications, (17), 1341-2; 1986

L8 ANSWER 162 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

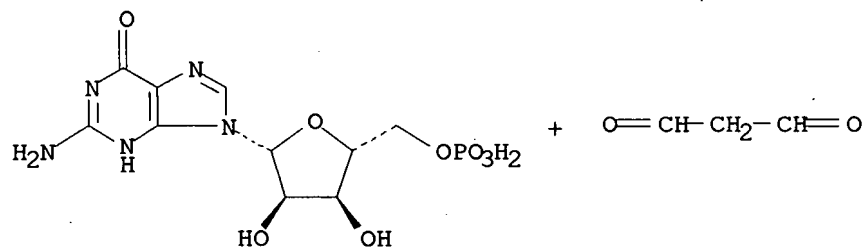
RX(15) OF 41



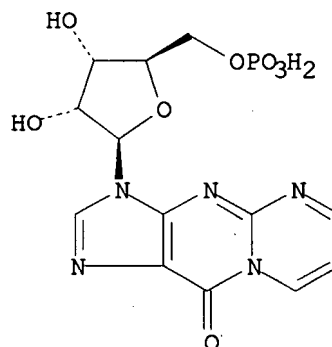
REF: Journal of Heterocyclic Chemistry, 23(1), 59-64; 1986

L8 ANSWER 163 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



KH_2PO_4 , Water



REF: Bulletin of the Chemical Society of Japan, 58(12), 3431-5; 1985

L8 ANSWER 164 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 6 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 165 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(10) OF 70 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 166 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

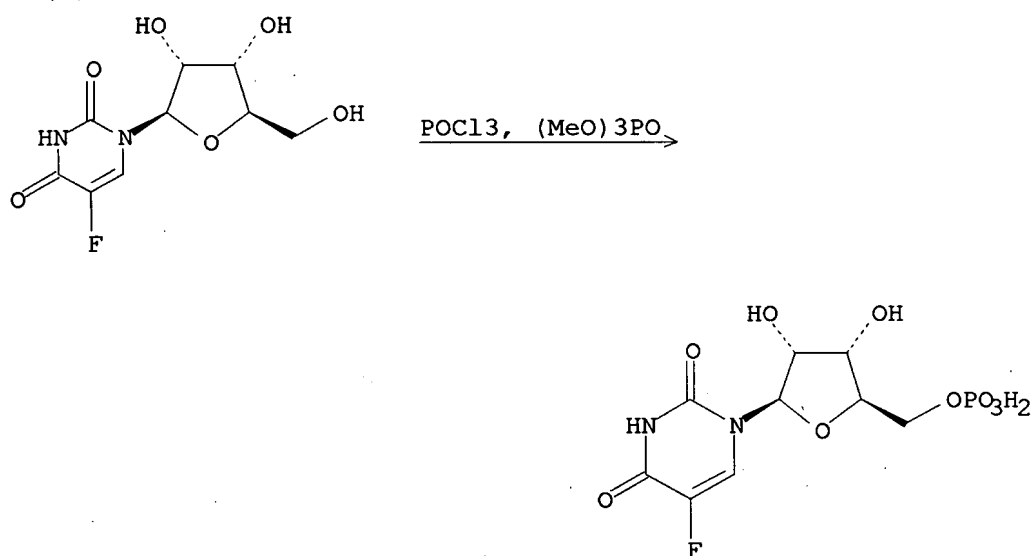
RX(10) OF 202 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 167 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(13) OF 95 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 168 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 4

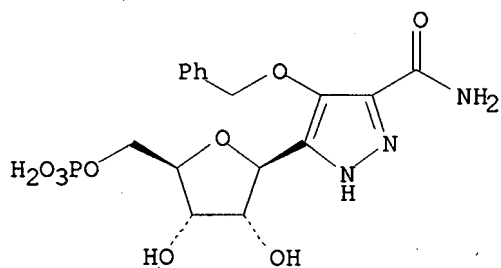
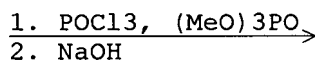
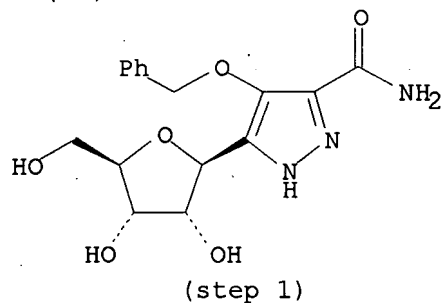


2 NH_3

REF: Journal of Medicinal Chemistry, 29(4), 488-93; 1986

L8 ANSWER 169 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(16) OF 76

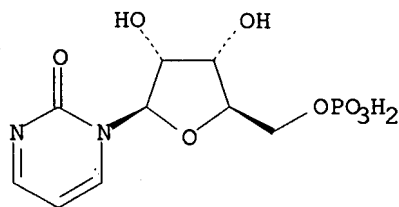
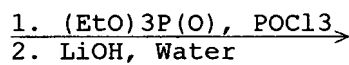
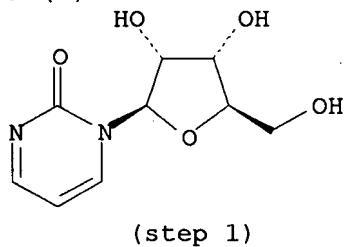


2 Na

REF: Journal of Medicinal Chemistry, 29(2), 268-78; 1986

L8 ANSWER 170 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 90



2 Li

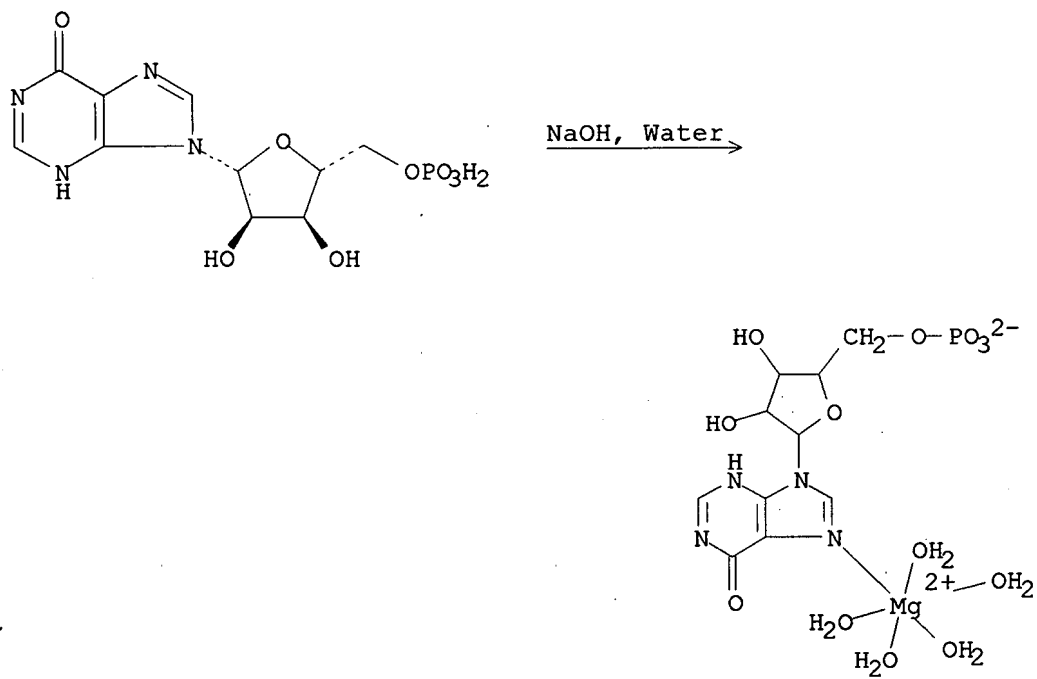
REF: Collection of Czechoslovak Chemical Communications, 50(2), 393-417; 1985

L8 ANSWER 171 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1 - REACTION DIAGRAM NOT AVAILABLE

L8 ANSWER 172 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

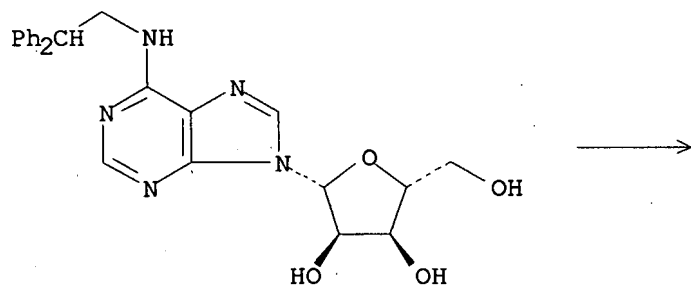
RX(1) OF 2



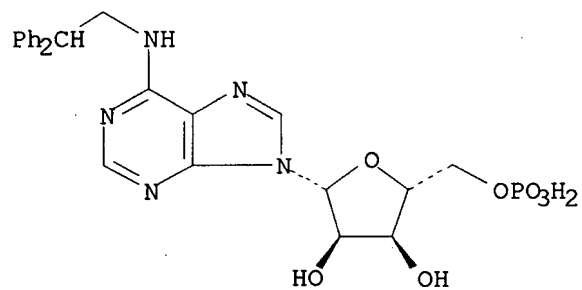
REF: Canadian Journal of Chemistry, 63(7), 2065-72; 1985

L8 ANSWER 173 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 3



RX(2) OF 3



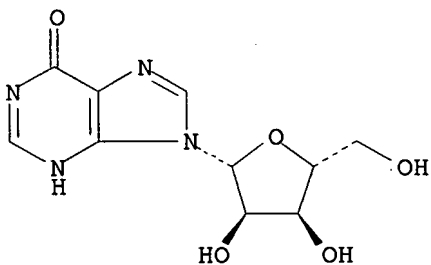
NH₃

Na

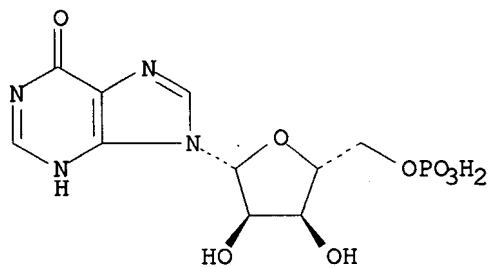
REF: Eur. Pat. Appl., 139358, 02 May 1985

L8 ANSWER 174 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(17) OF 25



KOH, Water →

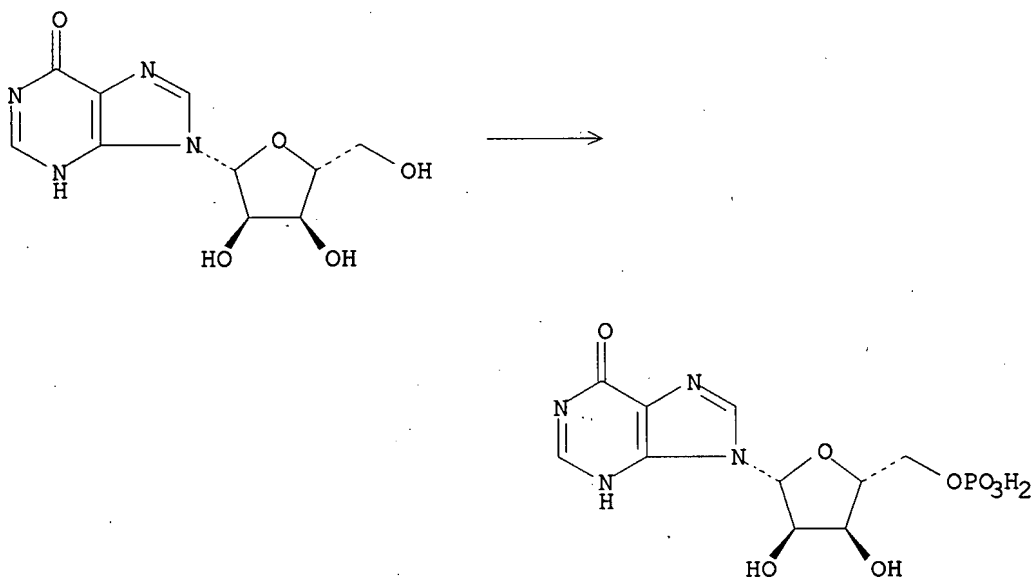


x K

REF: Chemische Berichte, 118(3), 931-42; 1985

L8 ANSWER 175 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

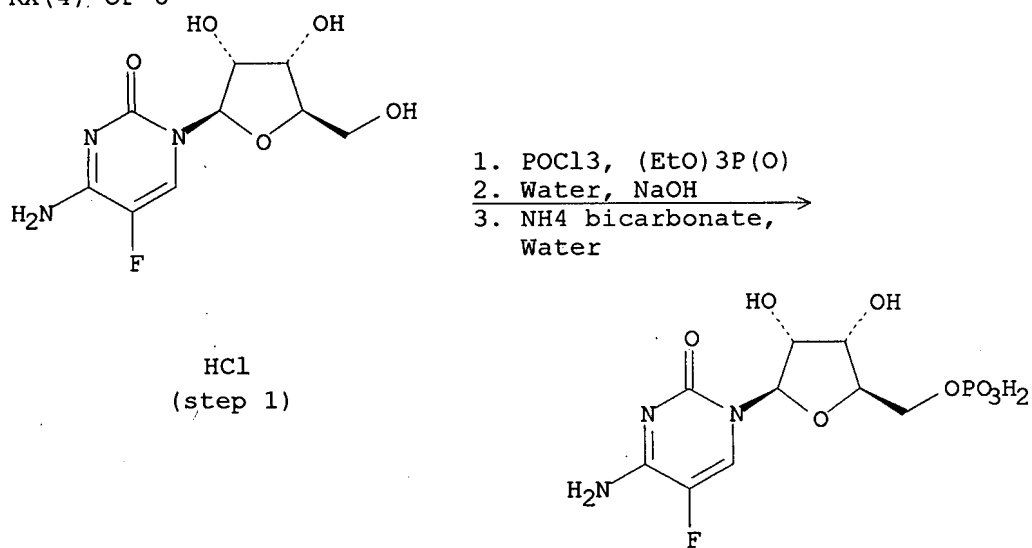
RX(1) OF 1



REF: Jpn. Kokai Tokkyo Koho, 59167599, 21 Sep 1984, Showa

L8 ANSWER 176 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(4) OF 6



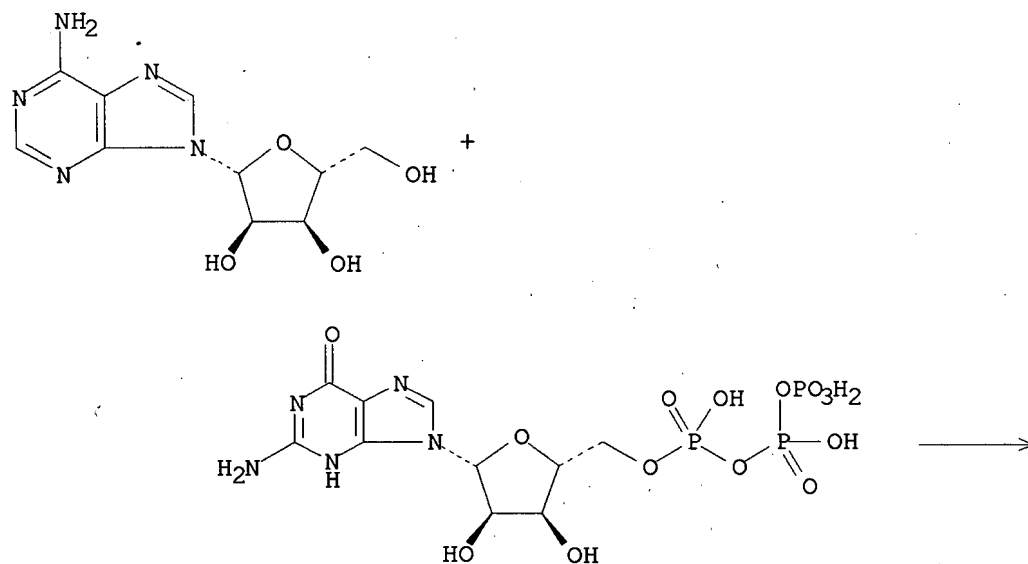
HCl
(step 1)

2 NH_3

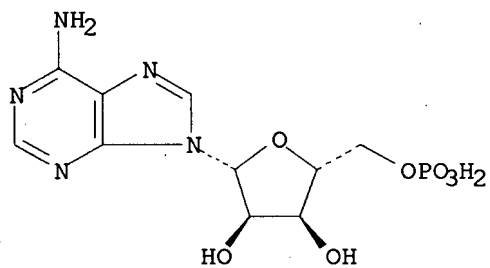
REF: Journal of Medicinal Chemistry, 28(4), 418-22; 1985

L8 ANSWER 177 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 2



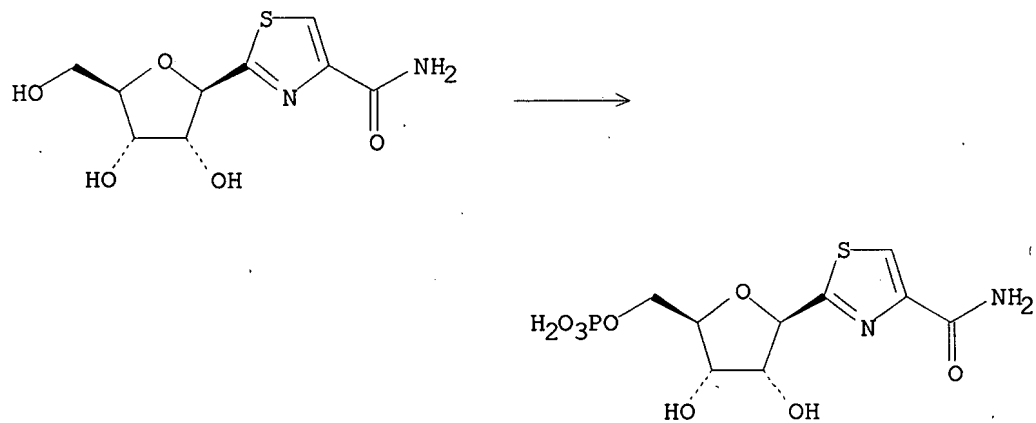
RX(2) OF 2



REF: Czech., 201337, 01 Mar 1983

L8 ANSWER 178 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3

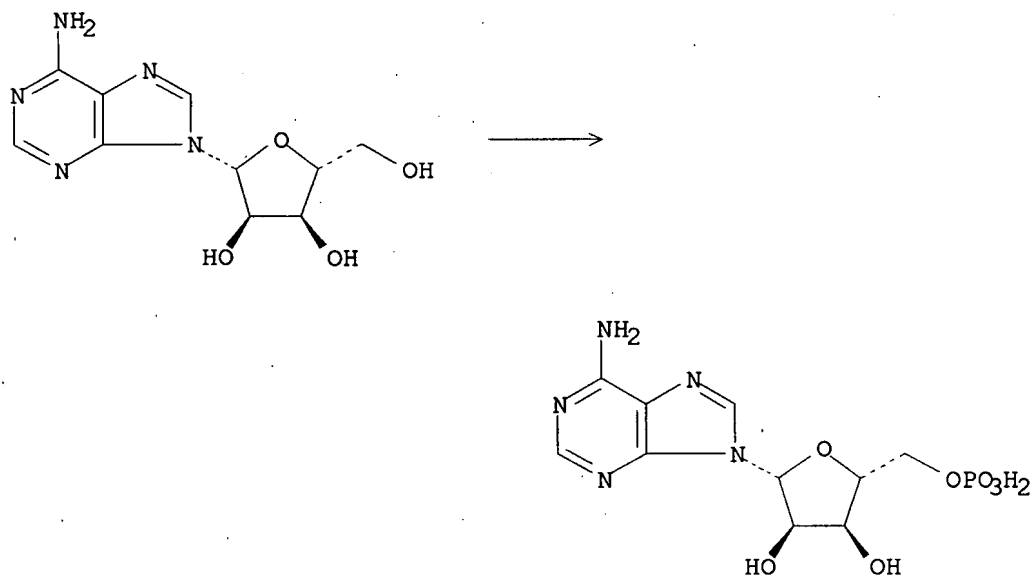


2 NH₃

REF: U. S. Pat. Appl., 423241, 18 Mar 1983

L8 ANSWER 179 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

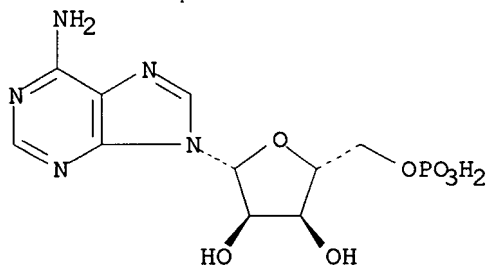
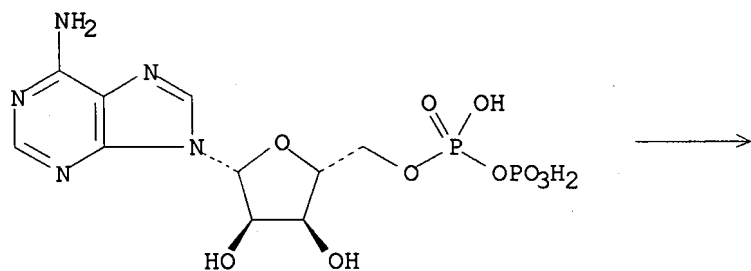
RX(4) OF 5



REF: U.S.S.R., 941384, 07 Jul 1982

L8 ANSWER 180 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

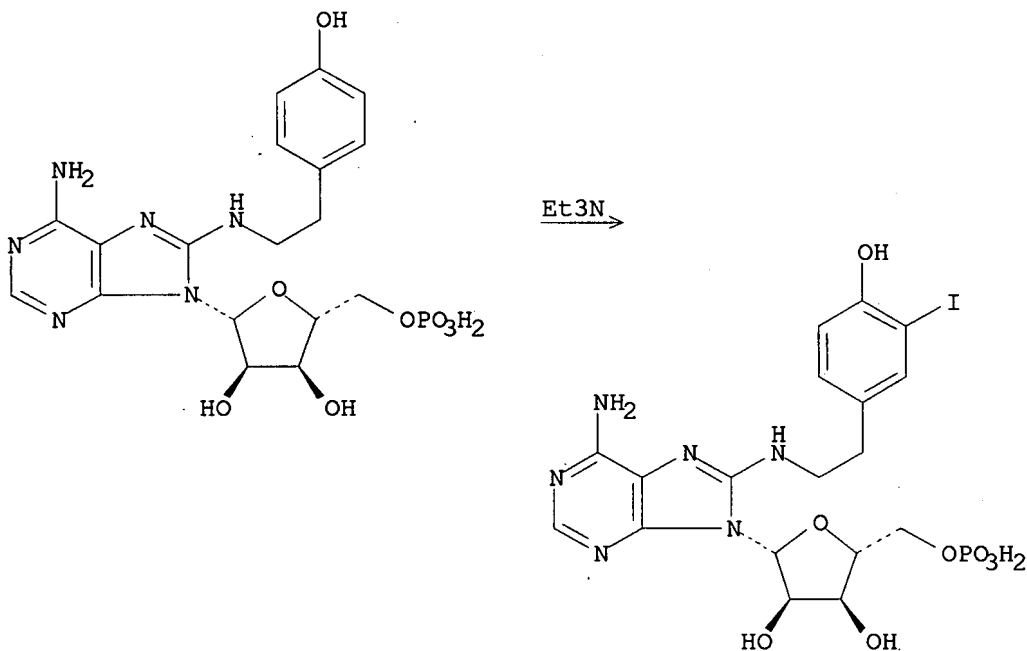
RX(1) OF 1



REF: Chemical & Pharmaceutical Bulletin, 30(8), 2926-34; 1982

L8 ANSWER 181 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

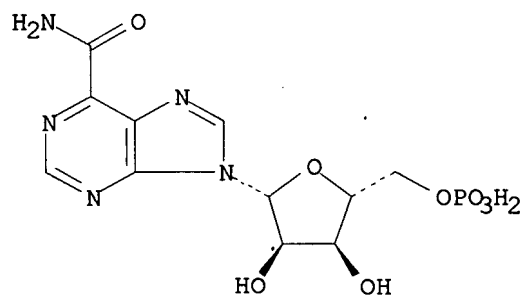
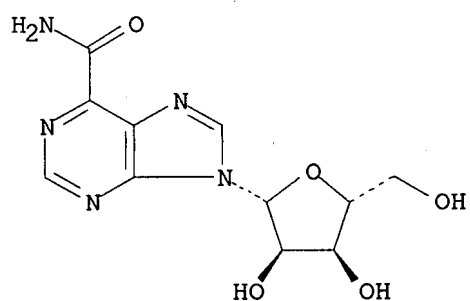
RX(1) OF 4



REF: Jpn. Kokai Tokkyo Koho, 57011996, 21 Jan 1982, Showa

L8 ANSWER 182 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

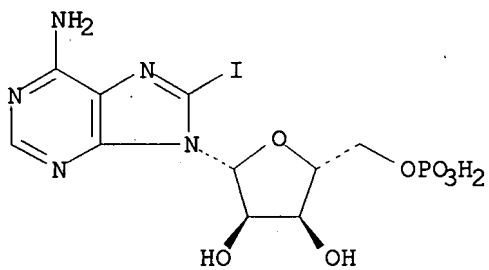
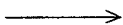
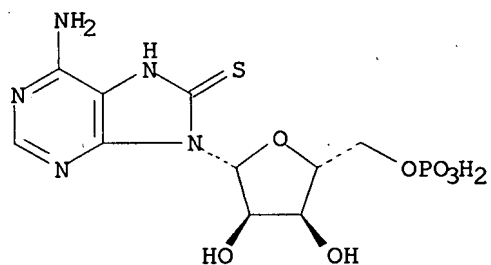
RX(1) OF 1



REF: U.S., 4328336, 04 May 1982

L8 ANSWER 183 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

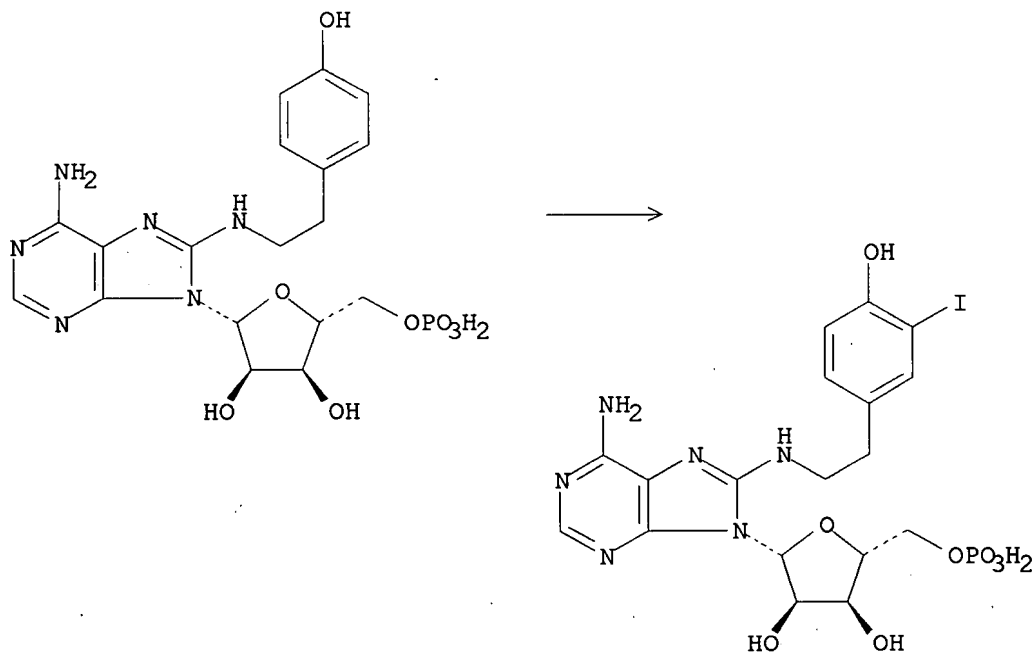
RX(1) OF 1



REF: Jpn. Kokai Tokkyo Koho, 57011997, 21 Jan 1982, Showa

L8 ANSWER 184 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

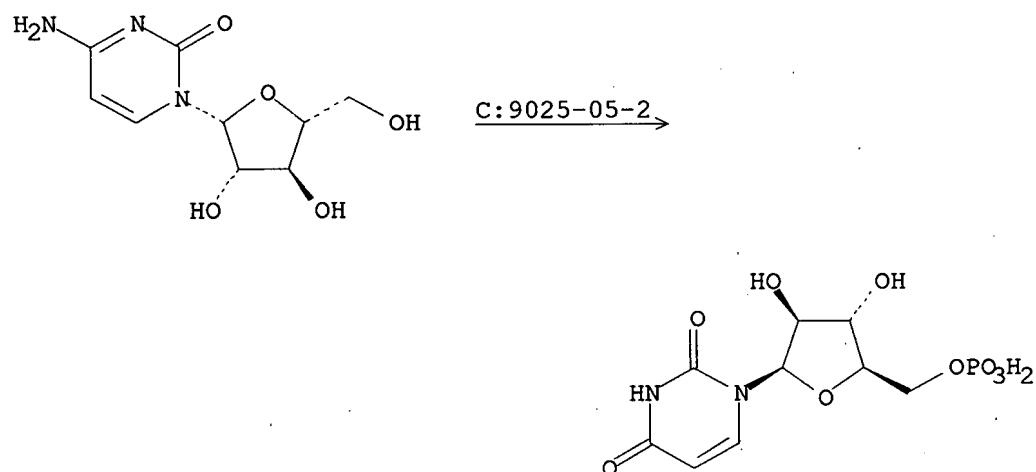
RX(1) OF 1



REF: Jpn. Kokai Tokkyo Koho, 57011999, 21 Jan 1982, Showa

L8 ANSWER 185 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3

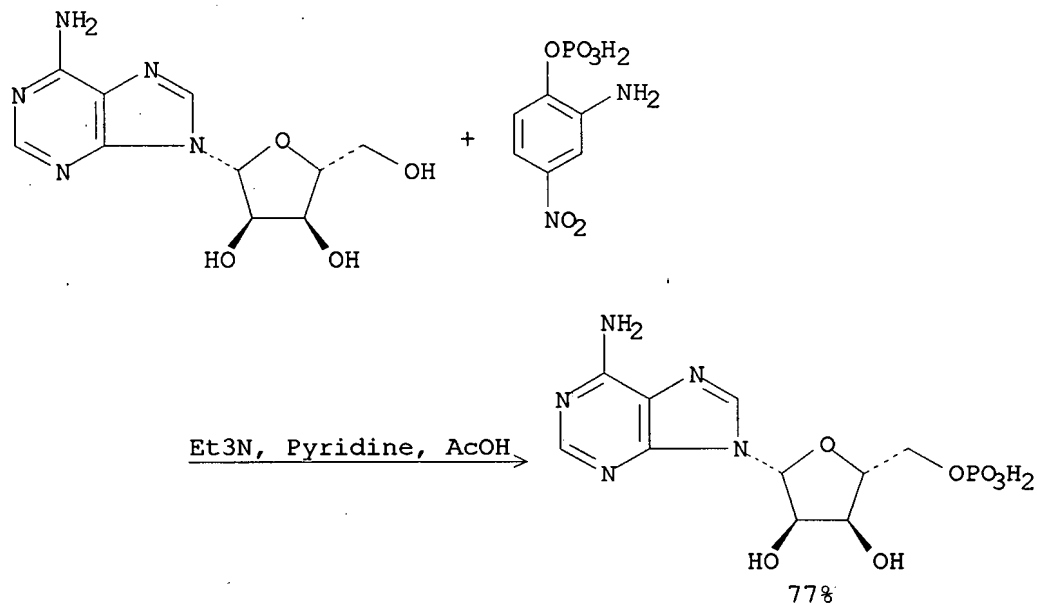


REF: Carbohydrate Research, 97(1), 139-46; 1981

NOTE: Biotransformation: catalyzed by cytosine deaminase from escherichia coli; # Conditions: 57 mmol educt; 30 u cellfree enzyme; 1 l water (ph 6,8); 2 d, 37.deg.c

L8 ANSWER 186 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 2

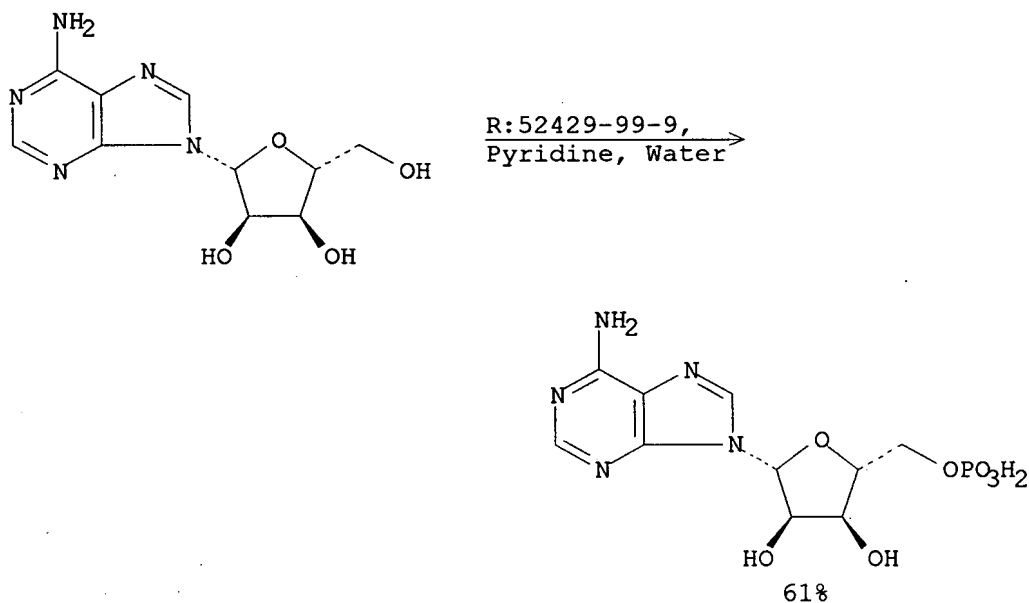


REF: Chemical & Pharmaceutical Bulletin, 23(7), 1586-8; 1975

NOTE: Classification: O-Phosphorisation; # Conditions: NEt₃ pyridine AcOH; Rf 3h; # Comments: phosphate reagent used as NEt₃ salt

L8 ANSWER 187 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1

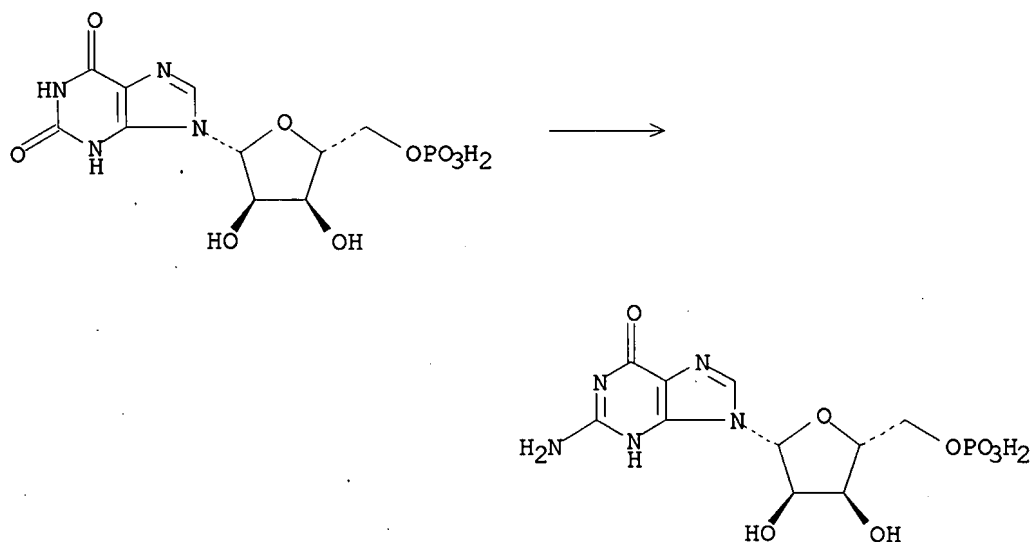


REF: Tetrahedron Letters, (14), 1279-82; 1974

NOTE: Classification: O-Phosphorisation; # Conditions:
PO(O-8-quinoline)3; pyridine 80 deg 8h; CuCl2 H2O; 100 deg 1h

L8 ANSWER 188 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2

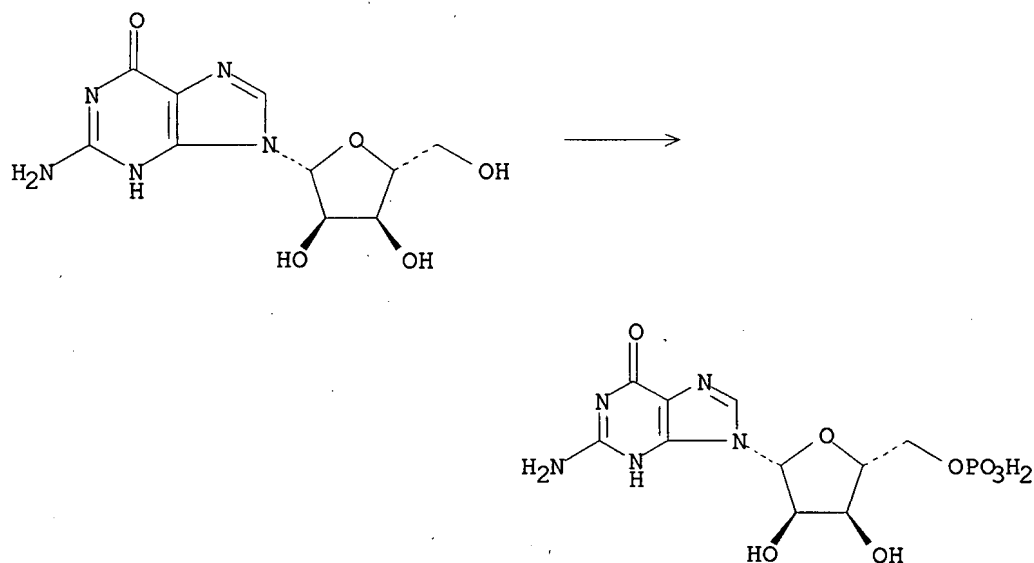


REF: Fr., 1582375, 26 Sep 1969

NOTE: Biotransformation: catalyzed by *brevibacterium ammoniagenes*; #
Conditions: 30 g/l educt; growing cells; 48 h

L8 ANSWER 189 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 5

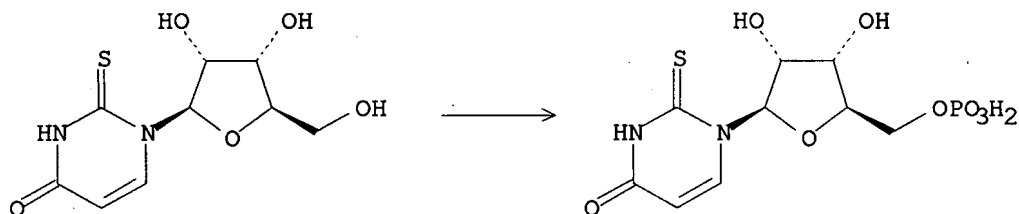


REF: Brit., 1188885, 22 Apr 1970

NOTE: Biotransformation: catalyzed by corynebacterium sp.; #
Conditions: educt is produced by bacillus subtilis in
prefermentation

L8 ANSWER 190 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1

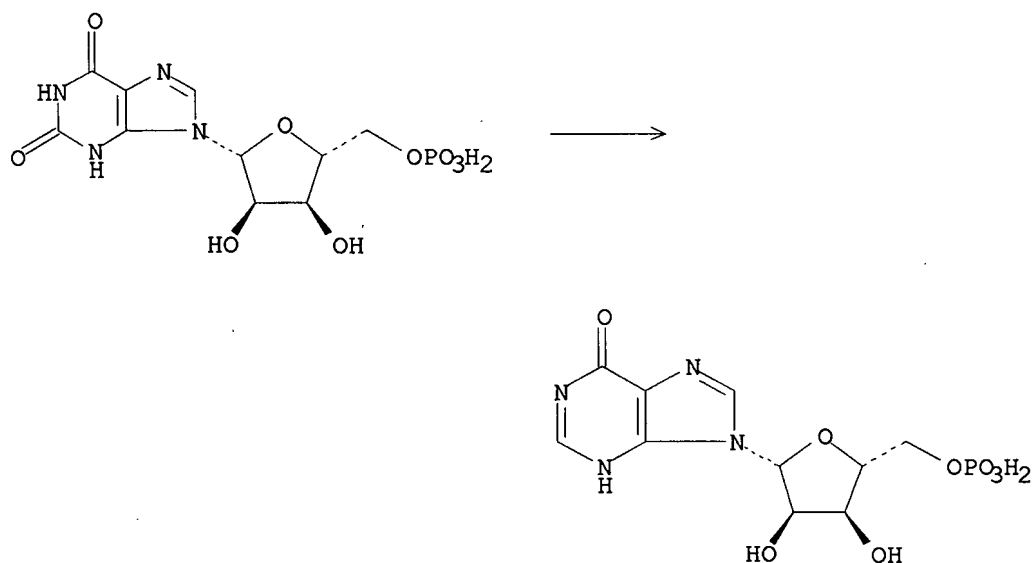


REF: Brit., 1184156, 11 Mar 1970

NOTE: Biotransformation: catalyzed by brevivacterium ammoniagenes; #
Conditions: 3 g/l educt; growing cells; 20 ml medium; 48 h,
30.deg.c

L8 ANSWER 191 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1

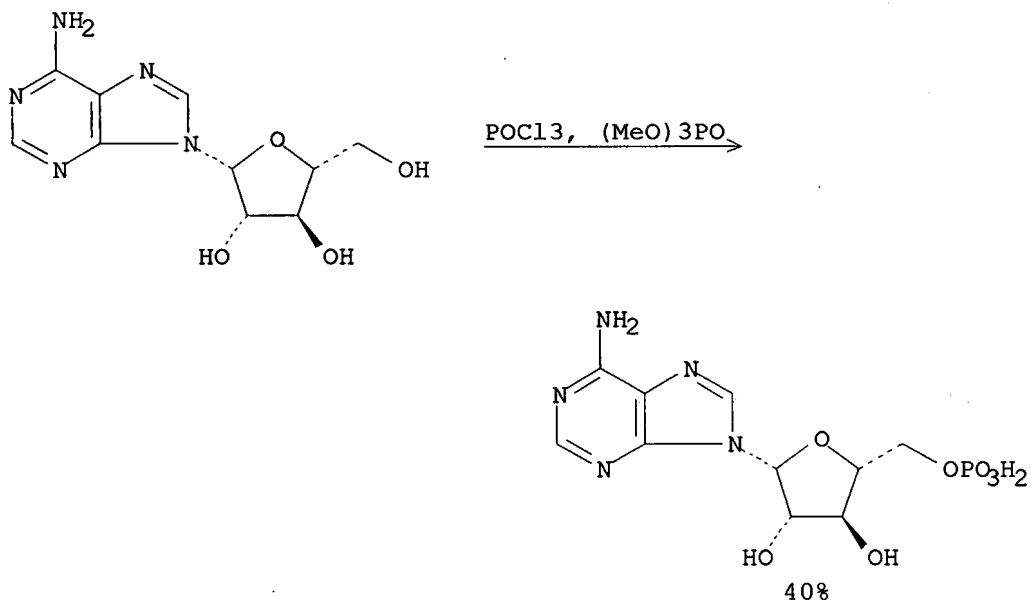


REF: Fr., 1556190, 31 Jan 1969

NOTE: Biotransformation: catalyzed by *brevibacterium ammoniagenes*; #
Conditions: 20 g/l educt; growing cells; 50 ml medium; 96 h,
30.deg.c

L8 ANSWER 192 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

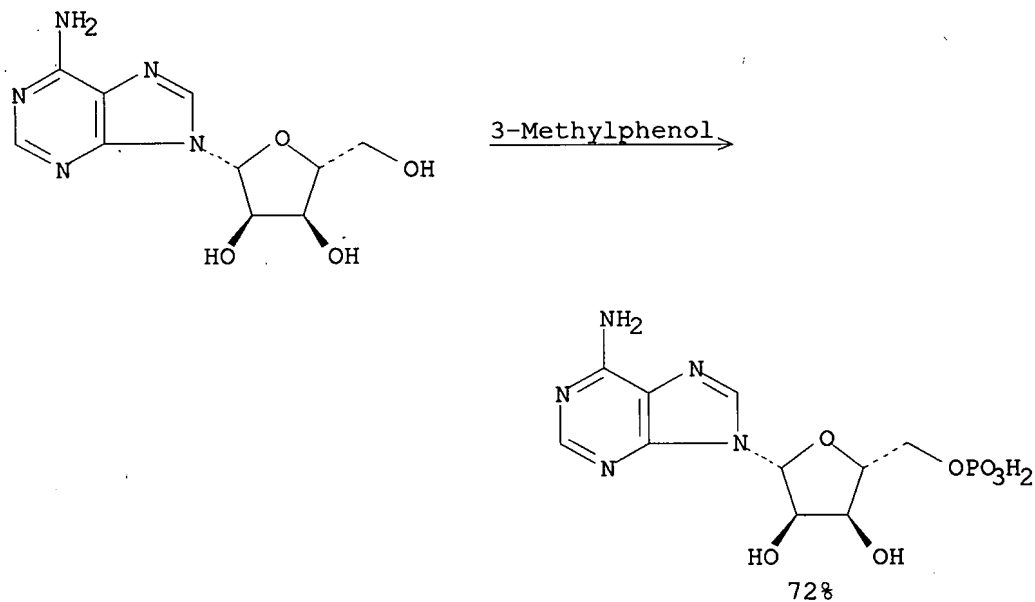
RX(2) OF 2



REF: Journal of the Chemical Society [Section] D: Chemical
Communications, (13), 740-1; 1969

NOTE: Classification: O-Phosphorisation; # Conditions: POCl_3 $(\text{MeO})_3\text{PO}$

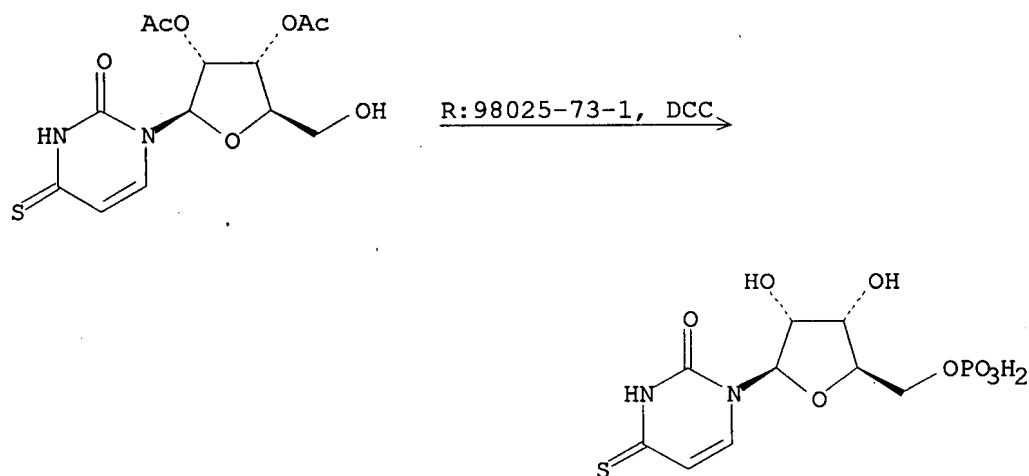
RX(1) OF 1



REF: Journal of Organic Chemistry, 34(6), 1547-50; 1969

NOTE: Classification: O-Phosphorisation; # Conditions: P2O3Cl4; m-cresol 2h 0-10 deg; # Comments: 7% of unchanged reactant; 3% yield of adenosine 2,3,5-diphosphate

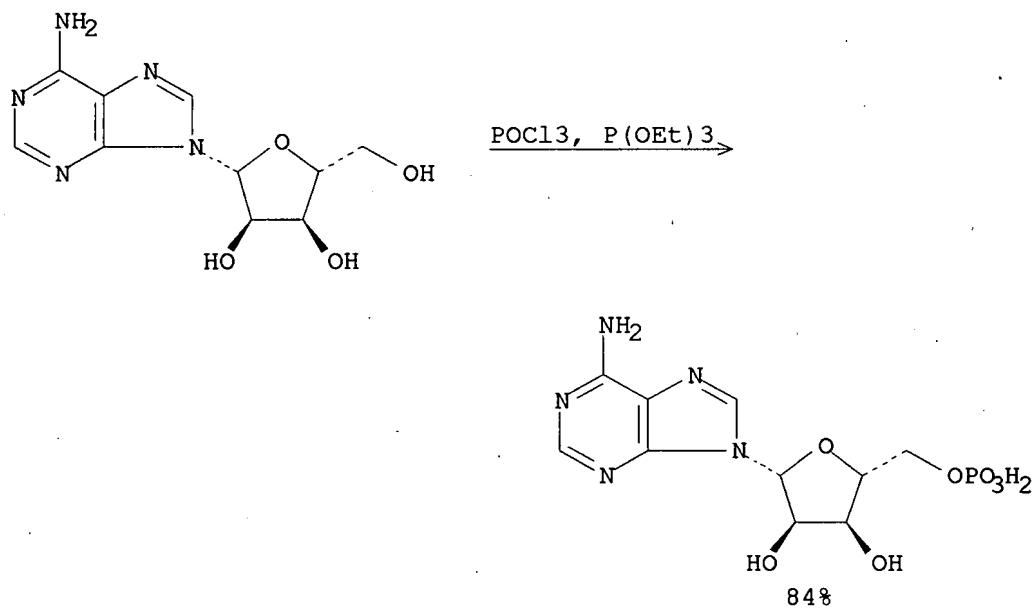
RX(1) OF 3



REF: Chemical & Pharmaceutical Bulletin, 17(1), 181-90; 1969

NOTE: Classification: O-Phosphorisation; O-Deacylation; O-Deprotection; Hydrolysis; # Conditions: PO(OH)2OCH2CN; DCC; OH-

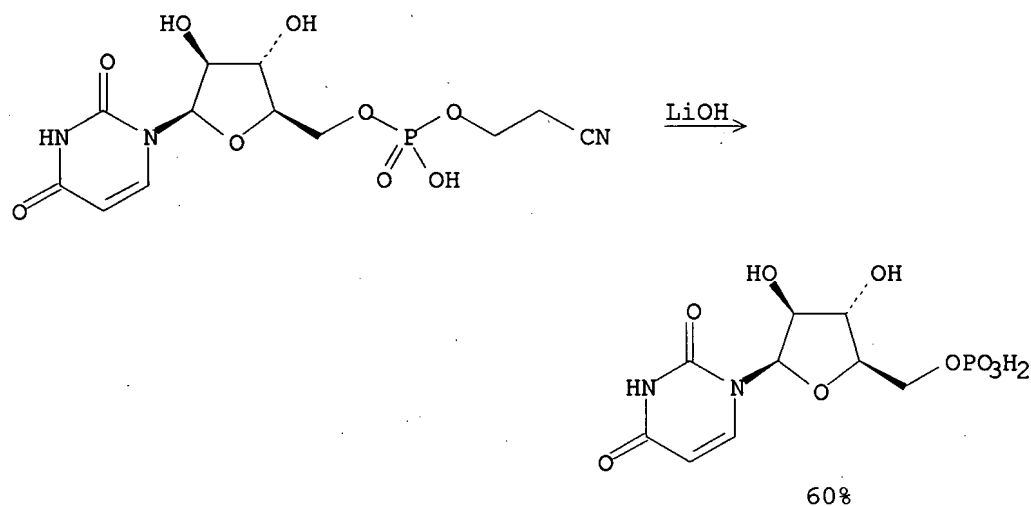
RX(1) OF 1



REF: Tetrahedron Letters, (50), 5065-8; 1967

NOTE: Classification: O-Phosphorisation; # Conditions: POCl_3 $\text{P}(\text{OEt})_3$; 6h 0 deg

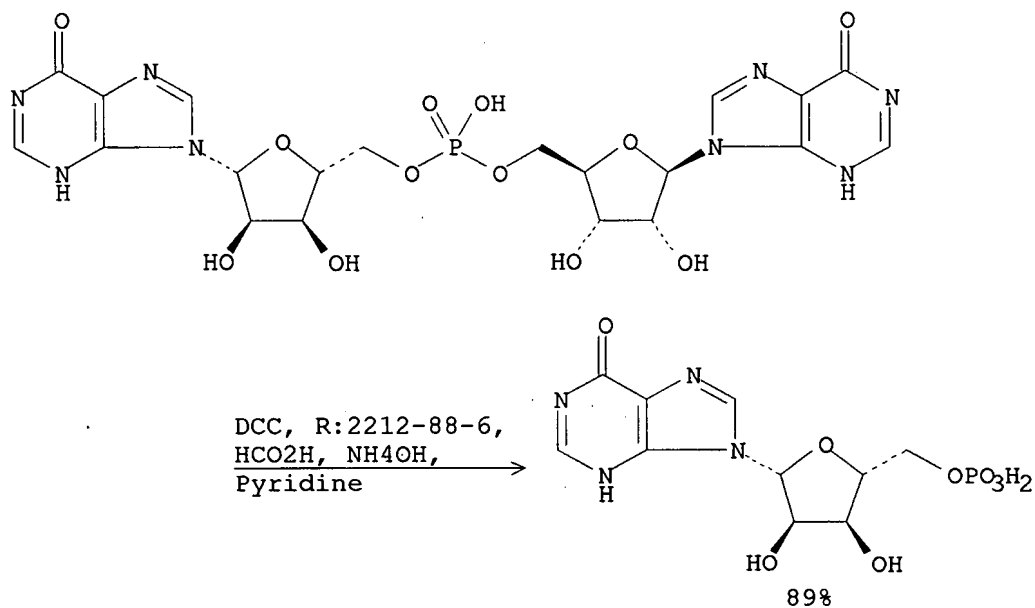
RX(3) OF 4



REF: Collection of Czechoslovak Chemical Communications, 32(11), 3958-65; 1967

NOTE: Classification: Hydrolysis; # Conditions: LiOH H+-resin

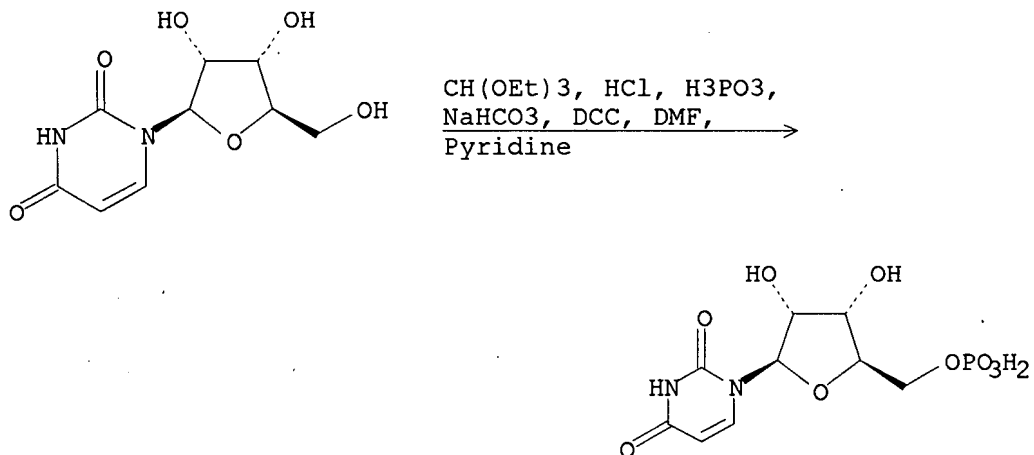
RX(1) OF 1



REF: Journal of Organic Chemistry, 30(9), 3211-12; 1965

NOTE: Classification: Hydrolysis; Cleavage; # Comments: second step of two stage reaction

RX(1) OF 1



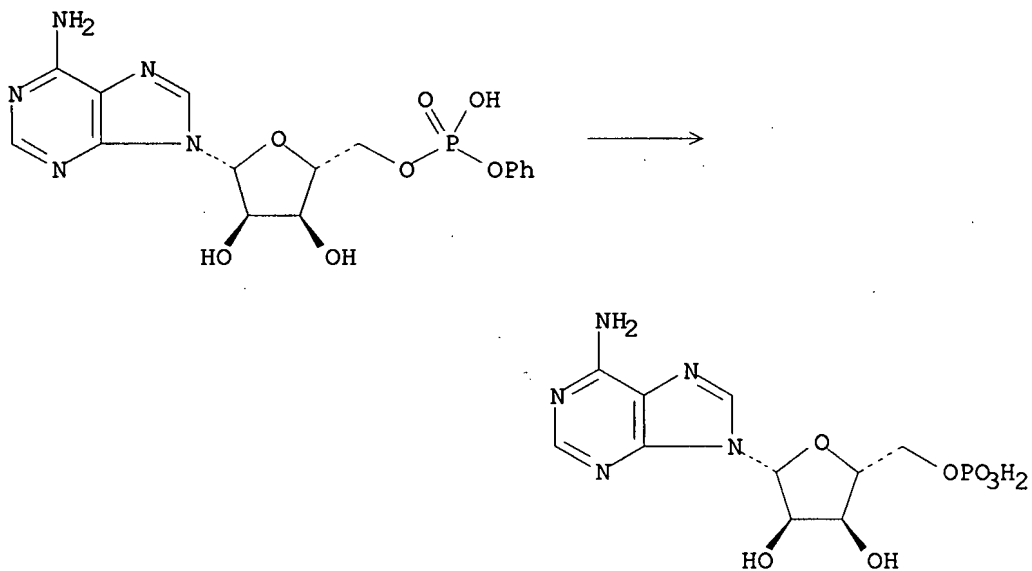
45%

REF: Collection of Czechoslovak Chemical Communications, 30(5), 1635-42; 1965

NOTE: Classification: O-Phosphorisation; # Conditions: (EtO)₃CH DMF; HCl NaHCO₃ 1,4-dioxan; 20 deg overnight + 1h; P(OH)₃ DCC pyridine; 20 deg 3days; # Comments: product as sodium salt

L8 ANSWER 199 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 2

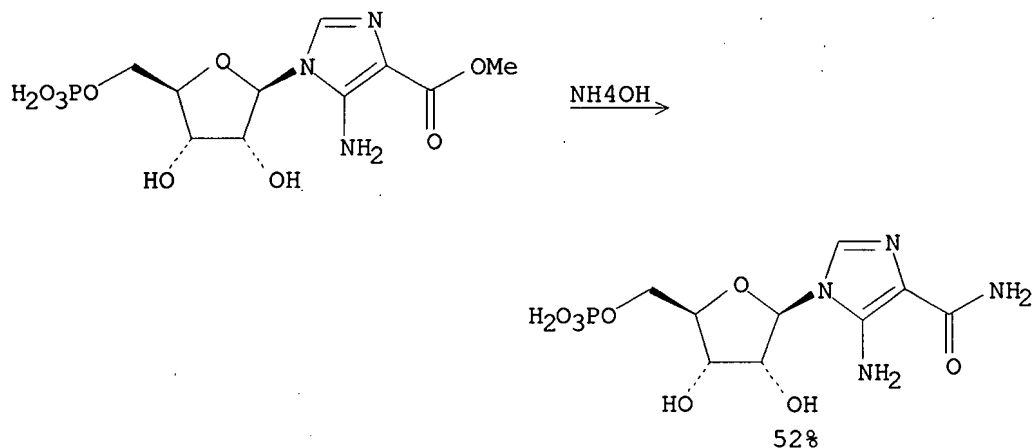


REF: Journal of Organic Chemistry, 30(4), 1077-80; 1965

NOTE: Classification: Cleavage; Hydrolysis; # Conditions: MgCl₂; mild Tris buffer; # Comments: also snake venom

L8 ANSWER 200 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 3

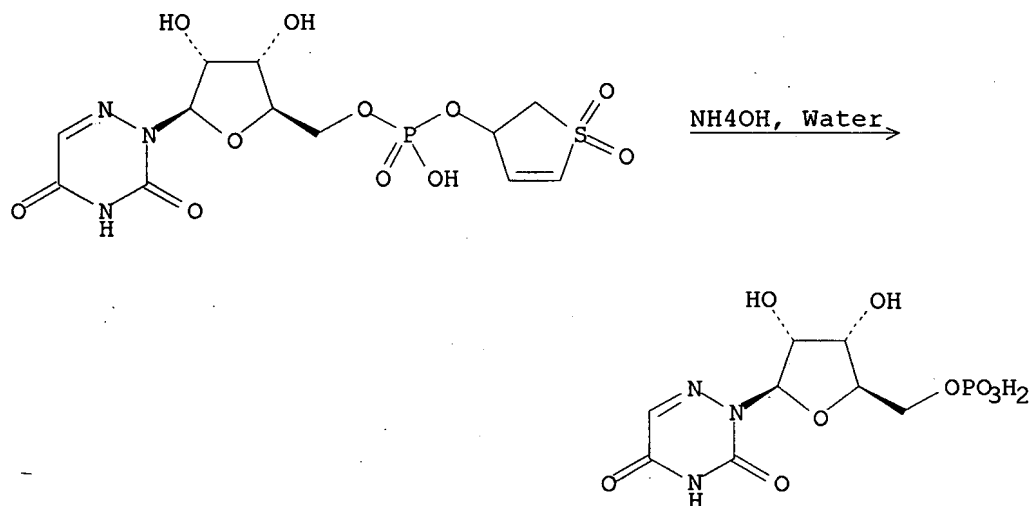


REF: Journal of the Chemical Society, (Aug.), 2650-7; 1964

NOTE: Classification: Substitution; C-Amination; # Conditions: NH_4OH
100 deg 8h; # Comments: Reactant as barium salt

L8 ANSWER 201 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 3

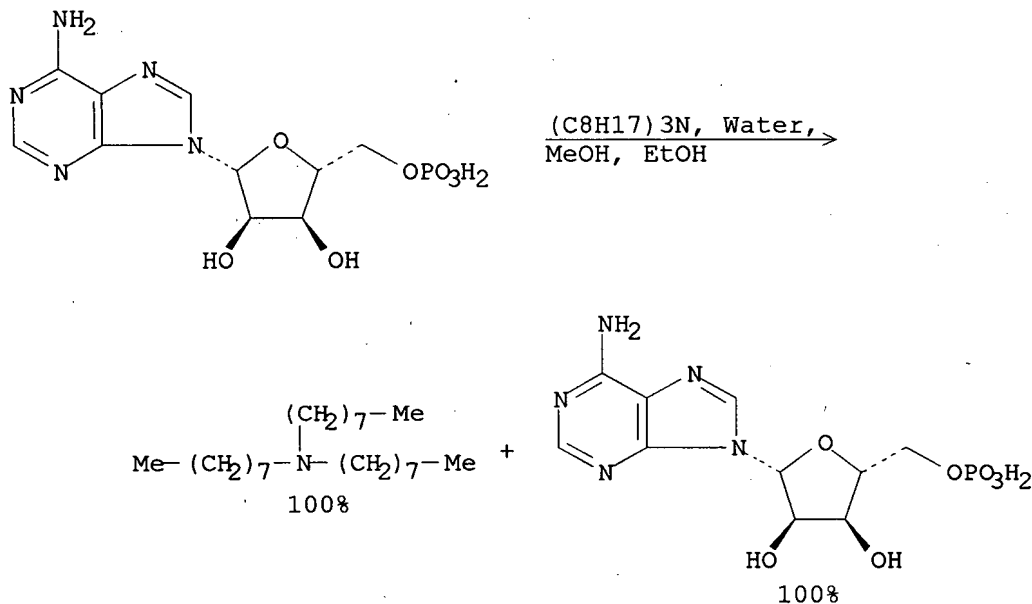


REF: Collection of Czechoslovak Chemical Communications, 27,, 2404-7;
1962

NOTE: Classification: Hydrolysis; # Conditions: NH_4OH H_2O ; 60 deg 30mn

L8 ANSWER 202 OF 202 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 10



REF: Chemische Berichte, 95,, 1664-9; 1962

NOTE: Classification: O-Amination; # Conditions: H₂O MeOH EtOH Rf

=> file stng

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.47

779.19

FILE 'STNGUIDE' ENTERED AT 09:30:21 ON 24 OCT 2007

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LAST RELOADED: Oct 19, 2007 (20071019/UP).

=> d his

(FILE 'HOME' ENTERED AT 09:23:03 ON 24 OCT 2007)

FILE 'CASREACT' ENTERED AT 09:23:14 ON 24 OCT 2007

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 960 S L1 FULL
L4 STRUCTURE UPLOADED
L5 50 S L4
L6 STRUCTURE UPLOADED
L7 11 S L6

FILE 'CAPLUS' ENTERED AT 09:26:51 ON 24 OCT 2007

FILE 'CASREACT' ENTERED AT 09:27:03 ON 24 OCT 2007

L8 202 S L6 FULL

FILE 'CAPLUS' ENTERED AT 09:27:09 ON 24 OCT 2007
L9 202 S L8
L10 151 S L9 AND PY<=2003
L11 2 S L10 AND (TOLUENE OR BENZENE OR CYCLOHEXANE OR HEXANE OR PENTA

FILE 'CASREACT' ENTERED AT 09:28:50 ON 24 OCT 2007

FILE 'CAPLUS' ENTERED AT 09:30:10 ON 24 OCT 2007

FILE 'STNGUIDE' ENTERED AT 09:30:21 ON 24 OCT 2007

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	779.61

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FILE LAST UPDATED: 23 Oct 2007 (20071023/ED)

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<http://www.cas.org/infopolicy.html>

=> l10 and xylene

111844 XYLENE
7229 XYLENES
113670 XYLENE
(XYLENE OR XYLENES)

L12 1 L10 AND XYLENE

=> d

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:605967 CAPLUS

DN **140:299909**

TI Photoaffinity labeling on magnetic microspheres (PALMm) methodology for topographic mapping: preparation of PALMm reagents and demonstration of biochemical relevance

AU Halbfinger, Efrat; Gorochesky, Karine; Levesque, Sebastien A.; Beaudoin, Adrien R.; Sheihet, Larisa; Margel, Shlomo; Fischer, Bilha

CS Department of Chemistry, Gonda-Goldschmied Medical Research Center,
Bar-Ilan University, Ramat-Gan, 52900, Israel
SO Organic & Biomolecular Chemistry (2003), 1(16), 2821-2832
CODEN: OBCRAK; ISSN: 1477-0520
PB Royal Society of Chemistry
DT Journal
LA English
OS CASREACT 140:299909
RE.CNT 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l10 and precip?
126845 PRECIP?
202484 PPT
68511 PPTS
251216 PPT
(PPT OR PPTS)
156301 PPTD
1 PPTDS
156302 PPTD
(PPTD OR PPTDS)
38742 PPTG
270845 PPTN
4458 PPTNS
273623 PPTN
(PPTN OR PPTNS)
641766 PRECIP?
(PRECIP? OR PPT OR PPTD OR PPTG OR PPTN)
L13 5 L10 AND PRECIP?

=> d l13 1-5 ibib kwic hitrn

L13 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:269862 CAPLUS
DOCUMENT NUMBER: 129:51240
TITLE: Syntheses of Photoactive Analogs of Adenosine
Diphosphate (Hydroxymethyl)pyrrolidinediol and
Photoaffinity Labeling of Poly(ADP-ribose)
Glycohydrolase
AUTHOR(S): Ramsinghani, Sushma; Koh, David W.; Ame,
Jean-Christophe; Strohm, Mark; Jacobson, Myron K.;
Slama, James T.
CORPORATE SOURCE: Department of Medicinal and Biological Chemistry
College of Pharmacy, University of Toledo, Toledo, OH,
43606, USA
SOURCE: Biochemistry (1998), 37(21), 7801-7812
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 129:51240
AN 1998:269862 CAPLUS
DN 129:51240
SO Biochemistry (1998), 37(21), 7801-7812
CODEN: BICHAW; ISSN: 0006-2960
AB . . . in the covalent incorporation of the photoprobe into the protein,

as demonstrated by gel electrophoresis followed by autoradiog. or acid precipitation of the protein followed by scintillation counting. No photoincorporation occurred in the absence of UV light. The photoincorporation saturated atomic . . .

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:612090 CAPLUS

DOCUMENT NUMBER: **97:212090**

TITLE: Adenosine 5'-triphosphate

INVENTOR(S): Brod, I. I.; Kestere, V.; Ludrika, R. A.; Shnitko, M. R.

PATENT ASSIGNEE(S): USSR

SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1982, (25), 113.

CODEN: URXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 941384	A1	19820707	SU 1979-2775197	19790530 <--
PRIORITY APPLN. INFO.:			SU 1979-2775197	19790530
OTHER SOURCE(S): CASREACT 97:212090				

AN 1982:612090 CAPLUS

DN **97:212090**

PI SU 941384 A1 **19820707**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 941384	A1	19820707	SU 1979-2775197	19790530 <--
AB . . . of AMP and ADP with 0.02N NaCl and 0.01N HCl, desorption of ATP with 0.5N NaCl in 0.02N HCl, and <u>precipitation</u> of the desired product with EtOH. In an improved procedure, the eluate containing AMP and ADP is concentrated (up to. . .				

L13 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1970:413139 CAPLUS

DOCUMENT NUMBER: **73:13139**

ORIGINAL REFERENCE NO.: 73:2197a,2200a

TITLE: 2-Thiouridylic acid by fermentation

PATENT ASSIGNEE(S): Kyowa Fermentation Industry Co., Ltd.

SOURCE: Brit., 4 pp.

CODEN: BRXXAA

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1184156		19700311	GB	<--
DE 1792550			DE	
FR 1581401			FR	
JP 47004509		19720000	JP	<--

US 3562111 19710000 US <--
PRIORITY APPLN. INFO.: JP 19670921
OTHER SOURCE(S): CASREACT 73:13139
AN 1970:413139 CAPLUS
DN 73:13139
OREF 73:2197a,2200a

PI	GB 1184156	<u>19700311</u>	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	GB 1184156				19700311	GB	<--
	DE 1792550					DE	
	FR 1581401					FR	
	JP 47004509				19720000	JP	<--
	US 3562111				19710000	US	<--

AB . . . dryness, dissolved in H₂O, and passed through a column of Dowex 50 (H⁺). The eluate is concentrated and I is precipitated by the addition of EtOH. The precipitate is dried to yield 0.8 g of I, having a purity of 80%. A pure I is obtained by treatment. . .

L13 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1965:417053 CAPLUS

DOCUMENT NUMBER: 63:17053

ORIGINAL REFERENCE NO.: 63:3026b-f

TITLE: Nucleic acid components and their analogs. LIX.
Preparation and properties of nucleoside phosphites

AUTHOR(S): Holy, A.; Smrt, J.; Sorm, F.

CORPORATE SOURCE: Ceskoslov. Akad. Ved., Prague

SOURCE: Collection of Czechoslovak Chemical Communications (1965), 30(5), 1635-42
CODEN: CCCCAK; ISSN: 0010-0765

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 63:17053

AN 1965:417053 CAPLUS

DN 63:17053

OREF 63:3026b-f

SO Collection of Czechoslovak Chemical Communications (1965),
30(5), 1635-42
CODEN: CCCCAK; ISSN: 0010-0765

AB . . . 6N HCl in dioxane, the solution kept overnight, 0.2 g. NaHCO₃ added, the suspension shaken 1 hr., filtered, and the precipitate washed with 5 ml. HCONMe₂. The combined filtrates were evaporated in vacuo, the residue dissolved in 5 ml. dry pyridine, . . . repeatedly evaporated with pyridine, shaken with 1.15 g. I in pyridine 3 days, diluted with H₂O, shaken 1 hr., the precipitated dicyclohexylurea, separated and washed with H₂O, the combined aqueous filtrates were evaporated in vacuo, the residue dissolved in

5%

aqueous. . . g. Ba(OAc)₂ added, and the solution (15 ml.) diluted with 200 ml.

96% EtOH. The resulting suspension was centrifuged, the precipitate suspended in 20 ml. H₂O, the insol. Ba phosphite collected and chromatographically pure Ba uridine 5'-phosphite obtained upon repeated precipitation with 96% EtOH. It was passed in aqueous solution over pyridinium Dowex 50-X 2, the eluate made alkaline to pH. . .

L13 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1962:463062 CAPLUS

DOCUMENT NUMBER: **57:63062**
ORIGINAL REFERENCE NO.: **57:12609i,12610a-f**
TITLE: Chemistry of high-energy phosphates. XV. Reactions of adenosine 5'-phosphoric acid imidazolide-a new synthesis of adenosine diphosphate and flavine adenine dinucleotide
AUTHOR(S): Cramer, Friedrich; Neunhoeffer, Hans
CORPORATE SOURCE: Tech. Hochschule, Darmstadt, Germany
SOURCE: Chemische Berichte (**1962**), 95, 1664-9
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 57:63062
AN 1962:463062 CAPLUS
DN **57:63062**
OREF 57:12609i,12610a-f
SO Chemische Berichte (**1962**), 95, 1664-9
CODEN: CHBEAM; ISSN: 0009-2940
AB . . . ml. MeOH with 18.3 mg. NaClO₄ in 5 ml. Me₂CO, followed by 5 ml. Me₂CO then 10 ml. Et₂O, the precipitate dried to give 43% I. I Na salt (41.9 mg.) in 20 ml. IV containing 108.1 rag. PhCH₂OH was kept. . . concentrated, the residue in 2 ml. MeOH treated with 6.1 mg. NaClO₄ in 2 ml. Me₂CO, followed by Me₂CO-Et₂O, the precipitate dried to give 94% Na adenosine 5' phosphate benzyl ester (V). III (35.5 mg.) and 32.4 mg. N,N'-carbonyldiimidazole (VI) were. . .

=> d his

(FILE 'HOME' ENTERED AT 09:23:03 ON 24 OCT 2007)

FILE 'CASREACT' ENTERED AT 09:23:14 ON 24 OCT 2007

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 960 S L1 FULL
L4 STRUCTURE UPLOADED
L5 50 S L4
L6 STRUCTURE UPLOADED
L7 11 S L6

FILE 'CAPLUS' ENTERED AT 09:26:51 ON 24 OCT 2007

FILE 'CASREACT' ENTERED AT 09:27:03 ON 24 OCT 2007

L8 202 S L6 FULL

FILE 'CAPLUS' ENTERED AT 09:27:09 ON 24 OCT 2007

L9 202 S L8
L10 151 S L9 AND PY<=2003
L11 2 S L10 AND (TOLUENE OR BENZENE OR CYCLOHEXANE OR HEXANE OR PENTA

FILE 'CASREACT' ENTERED AT 09:28:50 ON 24 OCT 2007

FILE 'CAPLUS' ENTERED AT 09:30:10 ON 24 OCT 2007

FILE 'STNGUIDE' ENTERED AT 09:30:21 ON 24 OCT 2007

FILE 'CAPLUS' ENTERED AT 09:34:48 ON 24 OCT 2007

L12 1 L10 AND XYLENE
L13 5 S L10 AND PRECIP?

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	20.76	800.37
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.90	-3.90

STN INTERNATIONAL LOGOFF AT 09:36:26 ON 24 OCT 2007

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JUL 02	LMEDLINE coverage updated
NEWS	3	JUL 02	SCISEARCH enhanced with complete author names
NEWS	4	JUL 02	CHEMCATS accession numbers revised
NEWS	5	JUL 02	CA/Capplus enhanced with utility model patents from China
NEWS	6	JUL 16	CAplus enhanced with French and German abstracts
NEWS	7	JUL 18	CA/Capplus patent coverage enhanced
NEWS	8	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS	9	JUL 30	USGENE now available on STN
NEWS	10	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS	11	AUG 06	FSTA enhanced with new thesaurus edition
NEWS	12	AUG 13	CA/Capplus enhanced with additional kind codes for granted patents
NEWS	13	AUG 20	CA/Capplus enhanced with CAS indexing in pre-1907 records
NEWS	14	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS	15	AUG 27	USPATOLD now available on STN
NEWS	16	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS	17	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS	18	SEP 13	FORIS renamed to SOFIS
NEWS	19	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS	20	SEP 17	CA/Capplus enhanced with printed CA page images from 1967-1998
NEWS	21	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS	22	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	23	OCT 02	CA/Capplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	24	OCT 19	BEILSTEIN updated with new compounds
NEWS EXPRESS	19	SEPTEMBER 2007:	CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
NEWS IPC8	For general information regarding STN implementation of IPC 8		

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:02:10 ON 24 OCT 2007

=> file casreact

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CASREACT' ENTERED AT 10:02:17 ON 24 OCT 2007

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FILE CONTENT:1840 - 20 Oct 2007 VOL 147 ISS 18

New CAS Information Use Policies, enter HELP USAGETERMS for details.

*
* CASREACT now has more than 13.8 million reactions *
*

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

Uploading C:\Program Files\Stnexp\Queries\10575660\heterocycle 3.str



chain nodes :

6 7 8 9 10 16 17 18 19 20 21 22 23 24 27 28 30 31 33 34

ring nodes :

1 2 3 4 5 11 12 13 14 15

chain bonds :

1-10 2-6 3-7 4-8 6-31 7-30 8-9 11-20 12-16 13-17 14-18 16-34 17-33
18-19 19-21 21-22 21-23 21-24 23-28 24-27

ring bonds :

1-2 1-5 2-3 3-4 4-5 11-12 11-15 12-13 13-14 14-15

exact/norm bonds :

1-2 1-5 1-10 2-3 2-6 3-4 3-7 4-5 6-31 7-30 8-9 11-12 11-15 11-20
12-13 12-16 13-14 13-17 14-15 16-34 17-33 18-19 19-21 21-23 21-24

exact bonds :

4-8 14-18 23-28 24-27

normalized bonds :

21-22

G1:C,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:Atom 21:CLASS 22:CLASS 23:CLASS 24:CLASS 27:CLASS 28:CLASS
30:CLASS 31:CLASS 33:CLASS 34:CLASS

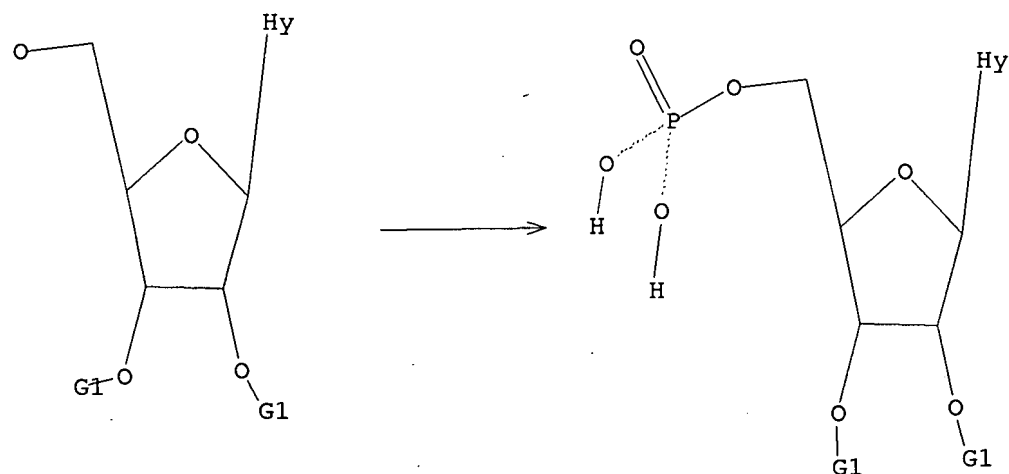
fragments assigned product role:
containing 11
fragments assigned reactant/reagent role:
containing 1

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 10:02:41 FILE 'CASREACT'

SCREENING COMPLETE - 1002 REACTIONS TO VERIFY FROM

58 DOCUMENTS

100.0% DONE 1002 VERIFIED 27 HIT RXNS

11 DOCS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED VERIFICATIONS: 18143 TO 21937

PROJECTED ANSWERS: 22 TO 418

L2 11 SEA SSS SAM L1 (27 REACTIONS)

=> s 11 full

FULL SEARCH INITIATED 10:02:47 FILE 'CASREACT'

SCREENING COMPLETE - 11713 REACTIONS TO VERIFY FROM

984 DOCUMENTS

100.0% DONE 11713 VERIFIED 948 HIT RXNS

202 DOCS

SEARCH TIME: 00.00.01

L3 202 SEA SSS FUL L1 (948 REACTIONS)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	113.55	113.76

FILE 'CAPLUS' ENTERED AT 10:02:51 ON 24 OCT 2007
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FILE COVERS 1907 - 24 Oct 2007 VOL 147 ISS 18
FILE LAST UPDATED: 23 Oct 2007 (20071023/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 13

L4 202 L3

=> l4 and ((toluene or benzene or hexane or pentane or cyclohexane or xylene or ether or "methylene chloride" or dichloromethan or "carbon tetrachloride" or chloroform or "ethyl acetate") (P) (precipitat? or filt?))

177989 TOLUENE
1535 TOLUENES
178557 TOLUENE
(TOLUENE OR TOLUENES)
318564 BENZENE
14727 BENZENES
323659 BENZENE
(BENZENE OR BENZENES)
115322 HEXANE
2037 HEXANES
116495 HEXANE
(HEXANE OR HEXANES)
39651 PENTANE
1180 PENTANES
40258 PENTANE
(PENTANE OR PENTANES)
97732 CYCLOHEXANE
3048 CYCLOHEXANES
99098 CYCLOHEXANE
(CYCLOHEXANE OR CYCLOHEXANES)

111844 XYLENE
 7229 XYLENES
 113670 XYLENE
 (XYLENE OR XYLENES)
 515133 ETHER
 152640 ETHERS
 576522 ETHER
 (ETHER OR ETHERS)
 129632 "METHYLENE"
 886 "METHYLENES"
 130159 "METHYLENE"
 ("METHYLENE" OR "METHYLENES")
 1168404 "CHLORIDE"
 160455 "CHLORIDES"
 1242266 "CHLORIDE"
 ("CHLORIDE" OR "CHLORIDES")
 16200 "METHYLENE CHLORIDE"
 ("METHYLENE" (W) "CHLORIDE")
 6 DICHLOROMETHAN
 1315646 "CARBON"
 28045 "CARBONS"
 1325584 "CARBON"
 ("CARBON" OR "CARBONS")
 71514 "TETRACHLORIDE"
 873 "TETRACHLORIDES"
 71962 "TETRACHLORIDE"
 ("TETRACHLORIDE" OR "TETRACHLORIDES")
 39079 "CARBON TETRACHLORIDE"
 ("CARBON" (W) "TETRACHLORIDE")
 64592 CHLOROFORM
 23 CHLOROFORMS
 64606 CHLOROFORM
 (CHLOROFORM OR CHLOROFORMS)
 481602 "ETHYL"
 31 "ETHYLS"
 481624 "ETHYL"
 ("ETHYL" OR "ETHYLS")
 667785 "ET"
 8176 "ETS"
 674382 "ET"
 ("ET" OR "ETS")
 1013166 "ETHYL"
 ("ETHYL" OR "ET")
 547856 "ACETATE"
 29193 "ACETATES"
 559838 "ACETATE"
 ("ACETATE" OR "ACETATES")
 41022 "ETHYL ACETATE"
 ("ETHYL" (W) "ACETATE")
 106841 PRECIPITAT?
 202484 PPT
 68511 PPTS
 251216 PPT
 (PPT OR PPTS)
 156301 PPTD
 1 PPTDS
 156302 PPTD

(PPTD OR PPTDS)
 38742 PPTG
 270845 PPTN
 4458 PPTNS
 273623 PPTN
 (PPTN OR PPTNS)
 627643 PRECIPITAT?
 (PRECIPITAT? OR PPT OR PPTD OR PPTG OR PPTN)
 782669 FILT?
 102983 (TOLUENE OR BENZENE OR HEXANE OR PENTANE OR CYCLOHEXANE OR XYLENE OR ETHER OR "METHYLENE CHLORIDE" OR DICHLOROMETHANE OR "CARBON TETRACHLORIDE" OR CHLOROFORM OR "ETHYL ACETATE") (P) (PRECIPITAT? OR FILT?)
 L5 0 L4 AND ((TOLUENE OR BENZENE OR HEXANE OR PENTANE OR CYCLOHEXANE OR XYLENE OR ETHER OR "METHYLENE CHLORIDE" OR DICHLOROMETHANE OR "CARBON TETRACHLORIDE" OR CHLOROFORM OR "ETHYL ACETATE") (P) (PRECIPITAT? OR FILT?))

=> 14 and (toluene or benzene or hexane or cyclohexane or dichloromethane or "methylene chloride" or "ethyl acetate" or pentane or xylene)

177989 TOLUENE
 1535 TOLUENES
 178557 TOLUENE
 (TOLUENE OR TOLUENES)
 318564 BENZENE
 14727 BENZENES
 323659 BENZENE
 (BENZENE OR BENZENES)
 115322 HEXANE
 2037 HEXANES
 116495 HEXANE
 (HEXANE OR HEXANES)
 1 CYCLODEXANE
 27466 DICHLOROMETHANE
 24 DICHLOROMETHANES
 27481 DICHLOROMETHANE
 (DICHLOROMETHANE OR DICHLOROMETHANES)
 129632 "METHYLENE"
 886 "METHYLENES"
 130159 "METHYLENE"
 ("METHYLENE" OR "METHYLENES")
 1168404 "CHLORIDE"
 160455 "CHLORIDES"
 1242266 "CHLORIDE"
 ("CHLORIDE" OR "CHLORIDES")
 16200 "METHYLENE CHLORIDE"
 ("METHYLENE" (W) "CHLORIDE")
 481602 "ETHYL"
 31 "ETHYLS"
 481624 "ETHYL"
 ("ETHYL" OR "ETHYLS")
 667785 "ET"
 8176 "ETS"
 674382 "ET"
 ("ET" OR "ETS")
 1013166 "ETHYL"
 ("ETHYL" OR "ET")

547856 "ACETATE"
29193 "ACETATES"
559838 "ACETATE"
("ACETATE" OR "ACETATES")
41022 "ETHYL ACETATE"
("ETHYL"(W) "ACETATE")
39651 PENTANE
1180 PENTANES
40258 PENTANE
(PENTANE OR PENTANES)
111844 XYLENE
7229 XYLENES
113670 XYLENE
(XYLENE OR XYLENES)

L6 6 L4 AND (TOLUENE OR BENZENE OR HEXANE OR CYCLODEXANE OR DICHLOROMETHANE OR "METHYLENE CHLORIDE" OR "ETHYL ACETATE" OR PENTANE OR XYLENE)

=> d l6 1-6 ibib kwic

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:784619 CAPLUS

DOCUMENT NUMBER: **145:397730**

TITLE: Structure-Activity Relationships of Uridine
5'-Diphosphate Analogues at the Human P2Y6 Receptor
AUTHOR(S): Besada, Pedro; Shin, Dae Hong; Costanzi, Stefano; Ko,
Hyojin; Mathe, Christophe; Gagneron, Julien; Gosselin,
Gilles; Maddileti, Savitri; Harden, T. Kendall;
Jacobson, Kenneth A.

CORPORATE SOURCE: Molecular Recognition Section, Laboratory of
Bioorganic Chemistry, National Institute of Diabetes
and Digestive and Kidney Diseases, National Institutes
of Health, Bethesda, MD, 20892, USA

SOURCE: Journal of Medicinal Chemistry (2006), 49(18),
5532-5543

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:397730

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AN 2006:784619 CAPLUS

DN **145:397730**

AB . . . the aromatic ring of Y33 in TM1. The activity of analog I in which
the ribose was substituted with a 2-oxa-bicyclo-**hexane** ring in a
rigid (S)-conformation (P = 126°, 1'-exo) was consistent with mol.
modeling. These results provide a better understanding. . .

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1265429 CAPLUS

DOCUMENT NUMBER: **143:478165**

TITLE: Method for preparing cytidine 5'-monophosphate

INVENTOR(S): Zhou, Jingkang

PATENT ASSIGNEE(S): Suzhou Industrial Park Seco Pharma Chemical Co., Ltd.,
Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12 pp.

CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1616475	A	20050518	CN 2004-10064715	20040921
PRIORITY APPLN. INFO.:			CN 2004-10064715	20040921
OTHER SOURCE(S): CASREACT 143:478165				
AN 2005:1265429 CAPLUS				
DN 143:478165				
IT 67-66-3, Trichloromethane, uses 68-12-2, Dmf, uses 75-09-2, Methylene chloride , uses 78-40-0, Triethyl phosphate 126-73-8, Tributyl phosphate, uses RL: NUU (Other use, unclassified); USES (Uses) (preparation of CMP)				

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:395325 CAPLUS
DOCUMENT NUMBER: **142:411591**
TITLE: Process for the preparation of fludarabine phosphate
by regioselective phosphorylation of fludarabine with
tri-ethyl phosphate and phosphorus oxychloride
INVENTOR(S): Cotticelli, Giovanni; Verzola, Barbara
PATENT ASSIGNEE(S): Adorkem Technology S.p.A., Italy
SOURCE: PCT Int. Appl., 8 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005040183	A2	20050506	WO 2004-EP11494	20041013
WO 2005040183	A3	20050630		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1673379	A2	20060628	EP 2004-817262	20041013
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1867575	A	20061122	CN 2004-80030273	20041013
IN 2006DN02005	A	20070713	IN 2006-DN2005	20060412
US 2007060745	A1	20070315	US 2006-575660	20060602
PRIORITY APPLN. INFO.:			IT 2003-MI1994	A 20031015
			WO 2004-EP11494	W 20041013

OTHER SOURCE(S): CASREACT 142:411591
AN 2005:395325 CAPLUS
DN 142:411591
AB . . . mixture composed of tri-Et phosphate and phosphorus oxychloride and
in accordance with a work-up which provides for the use of toluene

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:605967 CAPLUS
DOCUMENT NUMBER: 140:299909
TITLE: Photoaffinity labeling on magnetic microspheres
(PALMm) methodology for topographic mapping:
preparation of PALMm reagents and demonstration of
biochemical relevance
AUTHOR(S): Halbfinger, Efrat; Gorochesky, Karine; Levesque,
Sebastien A.; Beaudoin, Adrien R.; Sheihet, Larisa;
Margel, Shlomo; Fischer, Bilha
CORPORATE SOURCE: Department of Chemistry, Gonda-Goldschmied Medical
Research Center, Bar-Ilan University, Ramat-Gan,
52900, Israel
SOURCE: Organic & Biomolecular Chemistry (2003), 1(16),
2821-2832
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:299909
REFERENCE COUNT: 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

AN 2003:605967 CAPLUS
DN 140:299909
IT 98-59-9, p-Toluenesulfonyl chloride 431-47-0, Methyl trifluoroacetate
556-96-7, 5-Bromo-m-xylene 3001-45-4 67385-10-8
103659-66-1 172502-50-0D, bound to magnetic microspheres
RL: RCT (Reactant); RACT (Reactant or reagent)
(photoaffinity labeling on magnetic microspheres (PALMm) methodol. for
topog. mapping of enzymes hexokinase and apyrase)

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:894426 CAPLUS
DOCUMENT NUMBER: 138:106822
TITLE: Highly Selective Binding of Organometallic Ruthenium
Ethylenediamine Complexes to Nucleic Acids: Novel
Recognition Mechanisms
AUTHOR(S): Chen, Haimei; Parkinson, John A.; Morris, Robert E.;
Sadler, Peter J.
CORPORATE SOURCE: Department of Chemistry, University of Edinburgh,
Edinburgh, EH9 3JJ, UK
SOURCE: Journal of the American Chemical Society (2003),
125(1), 173-186
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:106822
REFERENCE COUNT: 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AN 2002:894426 CAPLUS

DN 138:106822

AB . . . anticancer complexes of the type $[(\eta^6\text{-arene})\text{Ru}(\text{II})(\text{en})\text{X}]$ (en = ethylenediamine, arene = biphenyl (Bip), tetrahydroanthracene (THA), dihydroanthracene (DHA), p-cymene (Cym) or benzene (Ben), X = Cl- or H₂O) was studied using ¹H, ³¹P and ¹⁵N (¹⁵N-en) NMR spectroscopy. For mononucleosides, $[(\eta^6\text{-Bip})\text{Ru}(\text{en})]^{2+}$ binds. . .

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:542313 CAPLUS

DOCUMENT NUMBER: 103:142313

TITLE: N6-Substituted diarylalkyladenosines

INVENTOR(S): Bristol, James A.; Trivedi, Bharat; Moos, Walter H.

PATENT ASSIGNEE(S): Warner-Lambert Co. , USA

SOURCE: Eur. Pat. Appl., 62 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 139358	A2	19850502	EP 1984-305047	19840725
EP 139358	A3	19851009		
EP 139358	B1	19881109		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
ZA 8405311	A	19860226	ZA 1984-5311	19840710
CA 1239397	A1	19880719	CA 1984-458620	19840711
IL 72422	A	19880831	IL 1984-72422	19840716
AU 8430782	A	19850207	AU 1984-30782	19840718
AU 570058	B2	19880303		
EP 251339	A2	19880107	EP 1987-110557	19840725
EP 251339	A3	19890726		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 38520	T	19881115	AT 1984-305047	19840725
FI 8403013	A	19850202	FI 1984-3013	19840730
FI 77666	B	19881230		
FI 77666	C	19890410		
DK 8403715	A	19850202	DK 1984-3715	19840731
DK 159855	B	19901217		
DK 159855	C	19910513		
NO 8403084	A	19850204	NO 1984-3084	19840731
NO 158876	B	19880801		
NO 158876	C	19881109		
JP 60075494	A	19850427	JP 1984-159394	19840731
HU 34990	A2	19850528	HU 1984-2928	19840731
ES 534752	A1	19860116	ES 1984-534752	19840731
US 4657897	A	19870414	US 1985-756004	19850717
US 4657898	A	19870414	US 1985-756922	19850718
PRIORITY APPLN. INFO.:				
				US 1983-519284 A 19830801
				US 1984-621943 A 19840622
				EP 1984-305047 P 19840725

OTHER SOURCE(S): CASREACT 103:142313; MARPAT 103:142313

AN 1985:542313 CAPLUS

DN 103:142313

IT 1113-59-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with benzene)

=> file stng

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
73.09	186.85

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-2.34	-2.34

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Oct 19, 2007 (20071019/UP).

=> d his

(FILE 'HOME' ENTERED AT 10:02:10 ON 24 OCT 2007)

FILE 'CASREACT' ENTERED AT 10:02:17 ON 24 OCT 2007

L1 STRUCTURE UPLOADED

L2 11 S L1

L3 202 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:02:51 ON 24 OCT 2007

L4 202 S L3

L5 0 L4 AND ((TOLUENE OR BENZENE OR HEXANE OR PENTANE OR CYCLOHEXANE

L6 6 L4 AND (TOLUENE OR BENZENE OR HEXANE OR CYCLODEXANE OR DICHLORO

FILE 'STNGUIDE' ENTERED AT 10:07:54 ON 24 OCT 2007

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS

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ENTRY	SESSION
0.30	187.15

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-2.34

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 10:11:04 ON 24 OCT 2007

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	("4357324").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 10:44
S2	1432	"fludarabine phosphate"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 09:04
S3	39	"fludarabine phosphate" with (synthesis or production or preparation or produce or prepare)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 10:53
S4	3	"4210745".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 10:08
S5	3	"4657897".pn. or "4657898".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 10:09
S6	2	"5110919".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 10:42
S9	4	"4328336".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/24 10:53

EAST Search History

S10	14	((GIOVANNI) near2 (COTTICELLI)). INV.	US-PGPUB; USPAT	OR	ON	2007/10/24 11:21
S11	1	S10 and precipit\$6.clm.	US-PGPUB; USPAT	OR	ON	2007/10/24 11:21
S12	1	S10 and hydrocarbon.clm.	US-PGPUB; USPAT	OR	ON	2007/10/24 11:21
S13	5	S10 and toluene.clm.	US-PGPUB; USPAT	OR	ON	2007/10/24 11:21